OFFICE OF SECURITY ASSESSMENTS INTEGRATED APPRAISAL GUIDE



February 2019

U.S. Department of Energy Office of Enterprise Assessments 19901 Germantown Road Germantown, Maryland 20874

This page intentionally left blank.

OFFICE OF SECURITY ASSESSMENTS INTEGRATED APPRAISAL GUIDE

February 2019

Table of Contents

Acronyms
Definitions
Section 1: Introduction 15
Section 1.1 Mission15
Section 1.2 Purpose15
Section 2: Roles and Responsibilities 16
Section 2.1 Team Chief16
Section 2.2 Deputy Team Chief16
Section 2.3 Topical Area Team Leads16
Section 2.4 Performance Testing POC17
Section 2.5 Force-on-Force Test Director17
Section 2.6 Primary Writers17
Section 2.7 Assessors17
Section 3: Appraisals Types
Section 3.1 Appraisal Types18
Section 3.2 Special Access Program and Sensitive Compartmented Information Facility
Assessments19
Section 3.3 Timeline
Section 4: Planning
Section 4.1 Scoping19
Section 4.2 Appraisal Plan and Memorandum21
Section 4.3 Data Call
Section 4.4 Performance Testing22
Section 4.5 Planning Meetings
Section 4.6 Integrated Schedule
Section 4.7 Document Review
Section 4.8 Small Scope Appraisals
Section 5: Conduct
Section 5.1 Workspace and Team Logistics and In-briefing
Section 5.2 Tours and Observations
Section 5.3 Interviews
Section 5.4 Performance Testing
Section 5.5 Informal Validation
Section 5.6 Team and Manager Meetings35
Section 5.7 Small Scope Appraisals

Section 6: Report Writing	
Section 6.1 Analysis of Results	
Section 6.2 Draft Report	
Section 6.3 Reviews	
Section 6.4 Documentation	41
Section 6.5 Closeout Briefing	41
Section 6.6 Small Scope Appraisals	42
Section 7: Post-Appraisal Activities	
Section 7.1 Formal Validation	43
Section 7.2 Final Report	43
Section 7.3 Briefings	
Section 7.4 Tracking and Trending	44

Attachments

1: Data Call: Pre-Scoping Meeting	47
2: Project Plan Example	48
3: Scoping Packet Example	49
4: Point of Contact Listing Template	50
5: EA-1 Pre-briefing Slide Template	51
6: Data Call: Integrated Planning	52
7: Test Description Document Template	53
8: Data Collection Form Example	55
9: Trusted Agent Non-Disclosure Form	
10: Integrated Schedule Template	59
11: Planning Worksheet Template	60
12: Interview Form Template	61
13: Multi-Topic Assessment Team Checklist	62
14: Issue Form	
15: Best Practice Criteria	64
16: Appraisal Report Template	65
17: Small Scope Appraisal Report Template	68
18: EA-1 Post-briefing Slide Template	69

Appendices

A: Program Planning and Management	70
B: Personnel Security	71
C: Protective Force	72
D: Physical Protection Systems	73
E: Material Control and Accountability	
F: Information Security	75
G: Topical Area References	

Acronyms

CAT	Composite Adversary Team
CFR	Code of Federal Regulations
DOE	Department of Energy
EA	Office of Enterprise Assessments
EA-13	Office of Enforcement
EA-22	Office of Security Assessments
LNPT	Limited-Notice Performance Test
LOI	Line of Inquiry
MRB	Management Review Board
MTA	Multi-topic Assessment
NNSA	National Nuclear Security Administration
NTC	National Training Center
POC	Point of Contact
QRB	Quality Review Board
S&S	Safeguards and Security
SNM	Special Nuclear Material
TA	Trusted Agent

Definitions

Reference U.S. Department of Energy (DOE) directives, technical standards, Federal supplemental guidance, or the DOE safeguards and security (S&S) Policy Information Resource at <u>www.pir.doe.gov</u> for additional definitions.

Access

- The knowledge, use, or possession of classified or other sensitive information required by an individual to perform official duties on a need-to-know basis.
- The ability or opportunity to gain knowledge of classified information.
- Situations that may provide an individual proximity to or control over special nuclear material (SNM).
- The proximity to a nuclear weapon and/or SNM in such a manner as to allow the opportunity to divert, steal, tamper with and/or damage the weapon or material.
- The ability and means to communicate with (i.e., input to or receive output from), or otherwise make use of, any information, resource, or component in a Classified Automated Information System.
- The ability to enter a defined area.

Access Authorization

- An administrative determination that an individual is eligible for access to particular types or categories of classified information or material.
- An administrative determination that an individual is eligible for access to, or control over, SNM.

Access Control

- The process of permitting access or denying access to information, facilities, SNM, resources, or designated security areas.
- The process of limiting access to information or to resources on a Classified Automated Information System only to authorized users.

Access Control Measures

Hardware and software features, physical controls, operating procedures, administrative procedures, and various combinations of these that detect or prevent unauthorized access to classified information; SNM; government property; Automated Information Systems, facilities, or materials; or areas containing the above, and to enforce use of these measures to protect DOE security and property interests.

Apparent Loss

The inability to physically locate, or otherwise account for, any of the following:

- An identifiable or discrete item (e.g., batch, lot, or piece) containing nuclear material.
- A nuclear material inventory difference in which the book inventory is larger than the physical inventory by an amount exceeding the established alarm limit.
- A shipper/receiver difference involving a discrepancy in which fewer items are received than shipped.
- A shipper/receiver difference whose magnitude exceeds the combined limit of error for the shipment and for which the receiver measures less material than the shipper.

Appraisal

An independent activity conducted by the Office of Enterprise Assessments (EA) to evaluate the effectiveness of line management performance and risk management or the adequacy of DOE policies and requirements. Appraisals include: multi-topic, targeted, focused, follow-up, and special assessments and limited-notice performance tests.

Assessor

A qualified DOE employee or contractor responsible for assessing, evaluating, and rating an S&S program.

Attractiveness Level

A grouping of SNM types and compositions that reflects the relative ease of processing and handling required to convert that material to a nuclear explosive device.

Augmentee

A contractor or Federal staff member from a DOE Headquarters or field element approved by EA Federal management to participate in scheduled appraisal activities under the guidance of the assigned Office of Security Assessments (EA-22) topical area team lead.

Authorization

Access rights granted to a user, program, or process.

Barrier

A coordinated series of natural or fabricated impediments that direct, restrict, limit, delay, or deny entry into a designated area.

Best Practice

A safety or security-related practice, technique, process, or program attribute observed during an appraisal that may merit consideration by other DOE and contractor organizations for implementation because it: (1) has been demonstrated to substantially improve safety or security performance of a DOE operation; (2) represents or contributes to superior performance (beyond compliance); (3) solves a problem or reduces the risk of a condition or practice that affects multiple DOE sites or programs; or (4) provides an innovative approach or method to improve effectiveness or efficiency.

Bulk Material

Nuclear material in any physical form that is not identifiable as a discrete item, and thus accounted for by weight, volume, sampling, chemical analysis, or non-destructive analysis.

Calibration

The process of determining the numerical relationship between the observed output of a measurement system and the value, based upon reference standards, of the characteristics being measured. (10 CFR Part 74.4)

Classified Information

Information that is classified by statute or Executive Order denoted by the classifications Top Secret, Secret, and Confidential.

Classified Materials

Chemical compounds, metals, fabricated or processed items, machinery, electronic equipment, and other equipment or any combination thereof containing or revealing classified information.

Classified Matter

Anything in physical form that contains or reveals classified information.

Classified Matter Protection and Control

A subtopic of information security designed to protect classified information from unauthorized disclosure. The program includes: the proper marking, storage, reproduction, transmission, and destruction of classified materials; the control and accountability of Top Secret documents, classified removable electronic media, certain Sigma information, and special access program materials; and training programs for users and custodians.

Classified Visit

A visit that will involve or is expected to involve access to, or an exchange of, classified information.

Cognizant Security Agency

Agencies of the Executive Branch authorized by Executive Order 12829, *National Industrial Security Program*, to establish an industrial security program to safeguard classified information under the jurisdiction of those agencies when disclosed or released to U.S. industry. These agencies include the Department of Defense, DOE, Central Intelligence Agency, and Nuclear Regulatory Commission. The Secretary of Energy is the cognizant security agency for DOE.

Cognizant Security Office

The office assigned responsibility for a given security program or function. Where stated, DOE Cognizant Security Office references a Federal activity. The organizational entity delegated by the head of a cognizant security agency to administer industrial security on behalf of the cognizant security agency.

Compensatory Measure

Temporary safeguards or security activity that affords equivalent protection for safeguards or security interests when a protection system element has failed or new requirement or vulnerability has been identified.

Composite Adversary Team

Designated staff members from EA, DOE and National Nuclear Security Administration sites who act or portray the part of an adversary during performance tests or force-on-force exercises.

Controlled Unclassified Information

Information that requires safeguarding and/or dissemination controls pursuant to and consistent with law, regulations, and government-wide policies, excluding information classified under Executive Order 13526, *Classified National Security Information*, December 29, 2009, or the Atomic Energy Act, as amended. Common types of Controlled Unclassified Information are Official Use Only, Unclassified Controlled Nuclear Information, and personally identifiable information.

Controller

An individual(s) assigned to assist a Test Director in conducting and controlling a performance test. Generally, controllers are assigned to all participants taking part in a performance test.

Corrective Action Plan

A formal written document that describes the specific steps, milestones, and estimated completion dates necessary to resolve the issue and address root causes. The extent of detail is based on the significance, impact, and complexity of the issue and the corrective actions.

Defense-in-Depth

The use of multiple, independent protection elements combined in layers so that system capabilities do not depend on a single component to maintain effective protection against defined threats.

Deficiency

An inadequacy in the implementation of an applicable requirement or performance standard identified during an appraisal. Deficiencies may serve as the basis for one or more findings.

Delay

The effect achieved by physical features, technical devices, or security measures or protective forces that impedes an adversary from gaining access to an asset being protected or from completing a malevolent act.

Derivative Classifier

An individual authorized to declassify or downgrade documents or material in specified areas as allowed by the individual's description of authority.

Destruction

- The physical alteration of classified matter that precludes the reconstruction or recovery of classified information.
- Annihilation, demolition, or reduction to pieces or to a useless form.

Detection

- The positive assessment that a specific object is the cause of the alarm.
- Announcement of a potential malevolent act through alarm(s).

Deviation

Any approved condition that diverges from the requirements as defined through an established process for identifying risks, categorizing as an equivalency or exemption according to the degree of risk, documenting, and approving at the authority level for the identified risk.

Diversion

- The unauthorized removal of nuclear material from its approved use or authorized location.
- An act that attempts to reposition the protective force to a location other than where the actual adversarial action is taking place.

DOE Oversight

Activities performed by DOE organizations to determine whether Federal and contractor programs and management systems, including assurance and oversight systems, are performing effectively and complying with DOE requirements. Oversight programs include surveys, operational awareness activities, onsite reviews, appraisals, self-assessments, performance evaluations, and other activities that involve evaluation of contractor organizations and Federal organizations that manage or operate DOE sites, facilities, or operations.

Effectiveness Test

A test to confirm that an essential element or total system is operating as required and can effectively perform a specified function.

Engagement Simulation System

Non-lethal system that permits players to simulate combat conditions and provides an accurate assessment of the effects of weapons fire during simulated hostile engagements. Several forms of engagement simulation systems are available, such as a multiple integrated laser engagement system, a dye marking cartridge system, a blank fire system, or inert systems.

Equivalency

Substitution of an alternative method for accomplishing the goal of a requirement.

Essential Elements

Protection and assurance elements necessary for the overall success of the S&S program at a facility or site. The failure of any one of these elements would result in protection effectiveness being significantly reduced or would require other elements to perform significantly better than expected to mitigate the failure. Essential elements include, but are not limited to, equipment, procedures, and personnel.

Evaluators

Trained individuals assigned the responsibility of formally assessing the readiness and performance effectiveness of S&S system elements during a performance test or force-on-force exercise.

Exemption

Release from implementing one or more requirements.

Facility

A facility consists of one or more security interests under a single security management responsibility or authority and a single facility security officer within a defined boundary that encompasses all the security assets at that location. A facility operates under a security plan that defines the security program for the facility and allows security management to maintain daily supervision of its operations, including day-to-day observations of the security program.

Field Administrative Coordinator

The individual responsible for the control of classified and unclassified sensitive matter in a deployed field environment. This individual also provides basic administrative support for teams deployed in field activities.

Finding

- A deficiency that warrants a high level of attention on the part of management. If left uncorrected, a finding could adversely affect the DOE mission, the environment, worker safety or health, the public, or national security. A finding defines the specific nature of the deficiency and whether it is localized or indicative of a systemic problem and identifies which organization is responsible for corrective actions.
- A factual statement of identified issues and deficiencies (failure to meet a documented legal, regulatory, performance, compliance, or other applicable requirement) in the S&S program at a facility, resulting from an inspection, survey, self-assessment, or any other S&S review activity.

Force-on-Force Exercises

- A scheduled appraisal event that tests the integrated capability of the protective force to implement emergency plans and procedures under simulated combat conditions.
- An exercise that uses designated personnel in the role of an adversary force to simulate the actual engagement of protective forces.

Full Disclosure

Adequate disclosure of all pertinent data necessary for a fair presentation in conformity with Generally Accepted Accounting Principles.

General Access Area

A type of security area established to allow access to certain areas with minimum security requirements as determined by the cognizant security authority. These designated areas are accessible to all personnel and the public.

Hazard Category 1

A nuclear facility safety classification for a facility with "potential for significant offsite consequences."

Hazard Category 2

A nuclear facility safety classification for a facility with "potential for significant onsite consequences, beyond localized consequences."

Hazard Category 3

A nuclear facility safety classification for a facility with "potential for only local significant consequences."

Importance Rating

A facility clearance categorization depending upon the assets and activities at a facility.

Information Security

- A topical area designed to protect and control classified matter. Includes classified matter protection and control, technical security, operations security, and classification guidance.
- A system of administrative policies and procedures for identifying, controlling, and protecting from unauthorized disclosure, information that is authorized protection by Executive Order or statute.

Insider

- Any person with authorized access to any government or contractor resource, including personnel, facilities, information, equipment, networks, or systems.
- For performance testing purposes, a person from an assessed facility who is assigned to assist, to the best of their ability, in planning and executing the test or exercise.

Integrated Performance Test

An evaluation method used to assess a total system or multiple elements within a system (e.g., SNM detection system at a security boundary), with a focus on the dynamics of interaction between components within the system.

Inventory

- A complete, detailed, descriptive record of classified document holdings that can be made consistent or compatible with documents on hand (reconciliation).
- The act of comparing documents to records of holdings.

Limited Area

A type of security area having boundaries defined by physical barriers, used for the protection of classified matter and/or Category III quantities of SNM, where protective personnel or other internal controls can prevent access by unauthorized people to classified matter or SNM.

Limited-Notice Performance Test

A coordinated and scheduled performance test conducted as part of the limited-notice performance testing program or other EA appraisal activity. The tests are planned and conducted with one or more site trusted agents (TAs) without prior announcement to other site personnel.

Limited-Scope Performance Test

A performance test that evaluates specific skills, equipment, or procedures. The events of the test may be interrupted to facilitate data collection, and may be purposely directed by evaluators to achieve evaluation goals.

Loss Detection Element

Any component of the safeguards system that can indicate an anomalous activity involving the possible loss of SNM.

Material Access Area

A type of security area that is approved for the use, processing, and/or storage of a Category I quantity or Category II with credible rollup to a Category I quantity of SNM; has specifically defined physical barriers; is located within a Protected Area; and is subject to specific access controls.

Material Control and Accountability

The parts of the safeguards program that provide information on, control of, and assurance of the presence of nuclear materials, including systems necessary to establish and track nuclear material inventories, control access to and detect loss or diversion of nuclear material, and ensure the integrity of those systems and measures.

Mitigation

Actions taken to minimize the effects of an event, and may include security measures, safety systems, emergency preparedness, administrative controls, and training and awareness.

Multiple Integrated Laser Engagement System

A type of engagement simulation system consisting of weapons-mounted laser transmitters, as well as laser sensors mounted on potential targets (e.g., personnel, vehicles, buildings) that permits accurate assessment of the effects of weapons fire during simulated hostile engagements.

National Security Assets

Departmental and contractor assets that require significant protection. These assets are nuclear weapons and their design, SNM, classified information, unclassified controlled information, critical facilities, and valuable Government property.

Objectivity

- The quality of a person or their judgment not being influenced by personal feelings or opinions in considering and representing facts.
- The generally accepted accounting principle that states all accounting reports are based on solid evidence or verifiable data.

Observer

An individual who observes a performance test but does not take part in test planning, control, play, or evaluation.

Official Use Only

Unclassified information that has the potential to damage governmental, commercial, or private interests and may be exempt from public release under the Freedom of Information Act.

Officially Designated Federal Security Authority

Federal employees who possess the appropriate knowledge and responsibilities for each authority assigned through delegation.

Officially Designated Security Authority

Federal or contractor employees who possess the appropriate knowledge and responsibilities for each authority assigned through delegation.

Operability Test

A test to confirm, without any indication of effectiveness, that a system component or total system is operating.

Opportunities for Improvement

• Suggestions offered for consideration that may assist cognizant managers in improving programs and operations.

Other Accountable Nuclear Materials

Accountable nuclear materials, other than SNM, that are listed in DOE Orders.

Performance Testing

- A process used for determining whether security features have been implemented as designed and are adequate for the proposed environment. May include hands-on functional testing, penetration testing, or software verification.
- Activities conducted to evaluate all or selected portions of safety and security systems, networks, or programs as they exist at the time of the test. Performance testing includes, but is not limited to, force-on-force exercises, tabletop exercises, knowledge tests, limited-scope performance tests, limited-notice performance tests, penetration testing, vulnerability scanning, continuous automated scanning, and cyber security "red teaming." Performance testing occurs as part of a scheduled appraisal activity (i.e., announced), or without prior knowledge of the tested entity (i.e., unannounced).
- A test to evaluate the ability of an implemented and operating system element or total system to meet an established requirement.

Physical Inventory

- Determination on a measured basis of the quantity of SNM on hand at a given time. The methods of physical inventory and associated measurements vary depending on the material inventoried and the process involved.
- The quantity of nuclear material determined to be physically on hand by ascertaining its presence using such techniques as sampling, weighing, and analysis.
- The sum of all the measured or derived estimates of batch quantities of nuclear material on hand at a given time within a material balance area, obtained in accordance with specified procedures. (10 CFR 74.4)

Player

An active participant in a performance test, either the person tested or as a role player, such as an adversary or a bystander.

Policy

The term "DOE policy" or "policy" when used in lower case includes all documents describing the philosophies, fundamental values, administration, requirements, and expectations for operation of the Department.

Portal Monitor

- Any electronic instrument that scans items, personnel, and vehicles entering or leaving a designated area to detect controlled or prohibited articles, such as weapons, explosives, and nuclear material.
- A designated point consisting of systems and protective personnel that scan items, personnel, and vehicles to detect controlled and prohibited articles.

Process

A series of actions that achieves an end or result.

Property Protection Area

A type of security area having defined boundaries and access controls for the protection of Departmental property.

Protected Area

A type of security area defined by physical barriers (i.e., walls or fences) and surrounded by intrusion detection and assessment systems to which access is controlled. Used to protect Category II SNM and classified matter and/or to provide a concentric security zone surrounding a material access area.

Protected Distribution Systems

• A fiber-optic distribution system designed to protect unencrypted classified signal/data lines that exit secure areas and traverse through lesser security areas.

• A wire line or fiber-optic telecommunications system that includes adequate acoustical, electrical, electromagnetic, and physical security measures to permit its use for the transmission of unencrypted classified information.

Qualified

A term indicating the satisfactory completion of a training program based on the knowledge and skills identified by a position job/function and task analysis.

Recommendations

Suggestions for senior line management's consideration for improving program or management effectiveness. Recommendations transcend the specifics associated with findings, deficiencies, or opportunities for improvement and derive from the aggregate consideration of the results of the appraisal.

Safeguards

An integrated system of physical protection, material accounting, and material control measures that deter, prevent, detect, and respond to unauthorized possession, use, or sabotage of nuclear materials.

Scrap

- Various forms of SNM generated during chemical and mechanical processing, other than recycle material and normal process intermediates, which are unsuitable for continued processing, all or part of which converts to usable material through appropriate recovery operations.
- Byproducts from chemical and/or mechanical processing containing economically recoverable nuclear materials.

Self-Assessment

- An internal integrated evaluation of all applicable S&S topical areas at a contractor facility or site, conducted by contractor security personnel at intervals consistent with risk management principles, to determine the overall status of the S&S program at that location and verify that S&S objectives are met.
- Internal review of the classification program to ensure it is effective and in compliance

Shadow Force

An armed security force that provides continuing site protection under the constant supervision of a controller while an exercise (e.g., force-on-force) is being conducted.

Site

Consists of one or more facilities operating under centralized security management, including a site security officer with consolidated authority and responsibility for the facilities, and covered by a site security plan that may consolidate or replace, wholly or partially, individual facility plans.

Special Nuclear Material

Plutonium, uranium- 233, uranium enriched in the isotope 235, and any other material that, pursuant to 42 U.S.C. 2071 (Section 51, as amended, of the Atomic Energy Act of 1954), has been determined to be SNM but does not include source material; it also includes any material artificially enriched by any of the foregoing, with the exception of source material.

Surveillance

The collection of information through devices and/or personnel observation to detect and assess unauthorized movements of nuclear material, tampering with nuclear material containers, falsification of information related to location and quantities of nuclear material, and tampering with safeguards devices.

Survey

A Federal integrated performance- and compliance-based evaluation of all applicable topics to determine the overall status of the S&S program at a facility or site and to ensure that S&S systems and processes at the location are operating in compliance with Departmental and national-level policies, requirements, and standards. Federal security personnel conduct or supervise surveys.

Technical Surveillance Countermeasures

- A program designed to prevent, deter, detect, isolate, and nullify technical surveillance penetrations and technical security hazards.
- The techniques and measures used to detect and nullify technologies intended to obtain unauthorized access to classified information.

Tempest

Short name referring to the investigation, study, and control of compromising emanations from telecommunications and automated information systems equipment.

Theft

The removal of government property and/or materials from a DOE or DOE contractor-operator facility without permission or authorization and contrary to law, or the unauthorized removal of SNM.

Threat

- A person, group, or movement with intentions to use extant or attainable capabilities to undertake malevolent actions against Departmental interests.
- The capability of an adversary coupled with his/her intentions to undertake any actions detrimental to the success of program activities or operations.
- Any circumstance or event with the potential to cause harm to an information system in the form of destruction, disclosure, adverse modification of data, and/or denial of service.
- Information suggesting the intent to attack or cause harm.
- A potential event capable of exploiting a vulnerability. Threats include both hazards and the triggering of flaws.

Trusted Agents

- A technically knowledgeable individual who acts as a neutral party to assist in planning and conducting a performance test.
- Individuals who have appropriate operational authority or a compartmented role necessary to provide administrative and logistical support for coordination and conduct of independent oversight scheduled and limited-notice performance test activities. Trusted agents are responsible for maintaining strict confidentiality of performance testing information and remaining impartial in validating and developing performance test parameters and events necessary to evaluate identified objectives.

Two-Person Rule

- Two authorized persons physically located where they have an unobstructed view of each other and/or item(s) and can positively detect unauthorized actions or access to nuclear materials.
- Use of CRYPTO keying materials, which also requires application of a similar two-person rule.
- As applied to the materials control program, an access control and materials surveillance procedure that requires that at least two authorized people be present in locations with nuclear materials in Category I amounts or Category II amounts with rollup potential to Category I (e.g., situations requiring two-person rule application include: (1) when vaults are entered, (2) when materials are transferred across material balance areas, and (3) when activities are performed involving the application or removal of tamper-indicating devices from items.)

Unclassified Controlled Nuclear Information

Unclassified government information whose unauthorized dissemination is prohibited under Section 148 of the Atomic Energy Act. Such information may concern details about the design of nuclear production or utilization facilities; security measures for protecting such facilities, nuclear materials contained in such facilities, or nuclear material in transit; or the design, manufacture, or use of nuclear weapons or components that were once classified as Restricted Data.

Validation

- The process by which the EA-22 appraisal program ensures the factual accuracy of collected data and effectively communicates strengths and weaknesses, and their potential impacts to the responsible Federal and contractor managers and organizations.
- The process used to verify the accuracy of data gathered during an inspection and/or appraisal activity.
- The determination of fitness for purpose of a measurement method applied for routine testing. Validation studies produce data on overall performance and on individual influence factors that can be applied to the estimation of uncertainty associated with the results of the method in normal use. Validation studies for analytical measurements typically determine some or all of the following parameters: precision, bias, linearity, detection limit, robustness, and selectivity/specificity.

Vault

A penetration resistant, windowless enclosure that has doors, walls, floor, and roof/ceiling designed and constructed to significantly delay penetration from forced entry and equipped with intrusion detection and assessment devices on openings allowing access.

Vault-Type Room

A Department-approved room having combination-locked doors and protection provided by a Departmentapproved intrusion alarm system activated by any penetration of walls, floors, ceilings, or openings, or by motion in the room.

Vulnerability Analysis

A systematic evaluation process applying qualitative and/or quantitative techniques to identify vulnerabilities and to arrive at an effectiveness level for an S&S system in order to protect specific assets from specific adversaries and their acts.

Wireless Security

Measures designed to test/evaluate the impact of mobile and fixed wireless communication devices used in or near classified and sensitive unclassified activity areas for determining risks and countermeasures.

Section 1: Introduction

1.1 Mission

The Office of Enterprise Assessments (EA) is the U.S. Department of Energy (DOE) independent organization responsible for performing appraisals, on behalf of the Secretary and Deputy Secretary, in the areas of safety, security, and other critical functions as directed by the Secretary and his leadership team. EA is also responsible for incorporating the lessons learned from investigations, reviews, and appraisals into safety and security training courses through its management of the National Training Center (NTC) and provides an open, effective means of communicating and creating collaborative relationships within and outside the Department. EA provides an important check-and-balance function that enables the Department to fulfill its responsibilities as a self-regulating entity and advises the Secretary and Deputy Secretary on all matters related to oversight, enforcement, safety and health, and training.

In support of the EA mission, the Office of Security Assessments (EA-22) provides feedback to internal and external stakeholders through the independent evaluation of the effectiveness of safeguards and security (S&S) policies and programs throughout DOE and the National Nuclear Security Administration (NNSA). The major intent of these appraisals is to foster continuous improvement in the Department's security program through the identification and effective communication of strengths, weaknesses, and unacknowledged program risks to DOE and NNSA management. To perform this mission, EA-22 plans and conducts a variety of announced and limited-notice appraisal activities, including performance tests, which incorporate a broad range of threats and scenarios to provide a complete and realistic evaluation of the readiness of site S&S systems to protect DOE assets, with an emphasis on high consequence activities and protection of high value security assets (e.g., Category I quantities of special nuclear material [SNM], classified matter, special access programs, sensitive compartmented information, critical infrastructure, and Restricted Data categories), as well as other areas of consideration whose performance may present significant risk.

1.2 Purpose

This EA-22 integrated appraisal guide provides a set of detailed tools and references that appraisal teams can use to plan, conduct, document, and close out an appraisal of S&S programs. These tools are designed for standardizing the appraisal approach to ensure procedures, tools, and worksheets are properly defined and support the identified scope and associated requirements. They also serve to promote consistency, ensure thoroughness, and enhance the quality of the process. This guide is a sub-tier document to the most current versions of the following three EA documents:

- The Office of Enterprise Assessments Operational Plan
- The Office of Enterprise Assessments Independent Oversight Program Appraisal Process Protocols
- The Office of Security Assessments Appraisal Process Protocols.

The EA operational plan provides an overview of the planning process, with a focus on efforts to ensure that EA activities are derived from EA strategic priorities and document the results specific activities conducted or initiated during the fiscal year. The EA appraisal process protocols document provides guidance for conducting appraisals in all sub-tier organizations. The EA-22 appraisal process protocol documents the processes, techniques, and procedures used to implement the EA protocols during evaluation of DOE and NNSA Federal and contractor organizations' security programs.

Section 2: Roles and Responsibilities

2.1 Team Chief

- Plans and leads appraisals as directed.
- Provides direction and guidance to the Deputy Team Chief on the approach to data collection activities.
- Oversees the development of appraisal plans.
- Oversees proposed appraisal team structure.
- Communicates upcoming appraisal activities to appropriate field and program office management well in advance of the scheduled activity.
- Ensures that team members perform assigned data collection and performance testing duties in accordance with relevant DOE policy and EA protocols.
- Addresses concerns associated with data collection activities when necessary.
- Oversees the development of appraisal reports.
- If a major vulnerability is identified, notifies EA management and the cognizant DOE manager in accordance with DOE policy.

2.2 Deputy Team Chief

- Supports the Team Chief in planning and leading appraisals.
- Develops site announcement memorandum, appraisal plan, and data call request.
- Provides input on recommended appraisal scope and scoping brief to the team.
- Provides direction and guidance on the approach to specific data collection activities.
- Provides feedback on proposed appraisal team structure and makes recommendations for additional resources needed to accomplish the scope.
- Ensures that team members perform assigned data collection and performance testing duties in accordance with DOE policy and EA protocols.
- Addresses site concerns associated with data collection activities as necessary.
- Provides daily feedback to site personnel on validation of appraisal information and clearly communicates areas of concern.
- Ensures coordination of and reviews in-briefing and out-briefing slides.

2.3 Topical Area Team Leads

- Support the Team Chief and Deputy during appraisal activities.
- Provide direction and guidance (including information provided by the Team Chief and Deputy) to topical area team members on the approach to data collection activities, including performance testing.

- Conduct a review of the data call, identify any missing information, develop topical team planning schedule, and status sheets prior to headquarters planning.
- Provide information and support to the EA-22 performance testing point of contact (POC) during planning and conduct of integrated performance testing activities.
- Coordinate with site POCs on the planning and conduct of topical area-specific performance testing scheduled during appraisal activities.
- Maintain currency on DOE policy to include national requirements, other program guidance, and supplemental directives for assigned S&S topics and conduct training with topical area team members as required.
- Provide feedback to the Team Chief and Deputy on proposed topical area team structure and skill set(s) and make recommendations for additional resources required to accomplish the scope or recommendations on scope reduction if appropriate resources are not or cannot be allocated based on direction from management.
- Assign appraisal team members for each subtopical area in scope.
- Prepare out-briefing slides and talking points.
- Address site concerns associated with data collection or performance testing activities as necessary.

2.4 Integrated Performance Testing POC

- Coordinates with topical area team leads and the force-on-force test director on integrated performance testing during appraisal activities.
- Coordinates with site POCs on the planning and conduct of integrated performance testing scheduled during appraisal activities.

2.5 Force-on-Force Test Director

- Coordinates with the integrated performance testing POC during appraisal activities.
- Interfaces with composite adversary team (CAT) and engagement simulation systems support personnel.
- Coordinates with site POCs on the planning and conduct of force-on-force performance testing.

2.6 Primary Writers

- Provide direction and guidance to the appraisal team members consistent with the EA-22 Guiding Principles for Report Writing and specific instructions from the Team Chief, Deputy, and team lead.
- Assist team members on the approach to specific appraisal activities.
- Coordinate with the team lead and assessors on input for the integrated schedule of activities during appraisals.
- When requested, coordinate and develop an integrated schedule of all topical area teams.
- Prepare appraisal reports.
- Assist team lead in preparing out-briefing slides.

2.7 Assessors

- Support the Team Chief, Deputy, topical area team leads, and other team members in conducting appraisals of security programs.
- Provide input to the topical area team leads on topical area scope and potential approaches for accomplishing security appraisals.
- Conduct appraisal process activities as described in this integrated guide and per the direction and guidance of topical area team leads.
- Conduct thorough, objective, and accurate evaluations.

Section 3: Appraisal Types

3.1 Appraisal Types

Appraisals are typically either system-level assessments that are broad in their program coverage and technical span, or comprehensive and in-depth evaluations of a functional area or program. EA-22 conducts a broad array of appraisals, including:

- **Multi-Topic Assessments:** Evaluation of the S&S topical areas related to the protection of DOE assets, including SNM or classified and sensitive unclassified matter, and site actions for deterring, detecting, and mitigating the insider threat. Typically, the largest amount of resources is required, as well as time on site, which ranges from one to two weeks of data collection activities and another week for developing a draft report. An important aspect of multi-topic assessments is the conduct of a wide range of performance tests, including large-scale force-on-force exercises consistent with the Department's threat policy.
- Focused Assessments: Generally smaller in scope than multi-topic assessments (MTAs) and are based on an analysis of current events or conditions at a site or location, rather than on a periodic basis. Focused assessments concentrate on a facility, operation, organization, program, or project at a site or location and may include limited-scope performance testing. They are commonly used for a specific topical and subtopical area, such as protective force, special access program, or sensitive compartmented information. Focused assessments may encompass activities conducted in conjunction with a DOE/NNSA line management activity or an assessment sponsored by another DOE office (e.g., Office of the Chief Information Officer or Office of Classification).
- Follow-up Assessments: Conducted to determine the status and progress of corrective actions and other actions taken in response to deficiencies identified during previous EA appraisals or DOE/NNSA line management oversight activities. The scope and team size for these assessments can vary and may include announced or limited-notice performance tests (LNPTs), as well as force-on-force exercises focusing on evaluating the effectiveness and sustainability of corrective actions.
- **Targeted Assessments:** Conducted to address concerns that transcend performance at a specific site or location. They might address the effectiveness of program elements as implemented across DOE and NNSA by analyzing complex-wide program issues, or analyze the implementation of a specific policy throughout the complex. Targeted assessments also address an area, concern, or weakness within a program, and may focus on the status of a specific program element or the adequacy of specific policies throughout DOE.
- **Special Assessments:** Requested by the Secretary or other senior DOE/NNSA managers, often on a "rapid response" basis, to provide specific information about security programs and policies, or other critical

functions and may include areas outside S&S. Additionally, the EA Director may propose the conduct of a special assessment if other EA activities suggest a need to do so.

• Limited-Notice Performance Testing: Coordinated and scheduled performance testing conducted as part of the LNPT program or other EA appraisal activity. Limited-notice testing activities are necessarily narrow in scope and limited in team size. The tests are planned and conducted with one or more site trusted agents (TAs) without prior announcement to other site personnel. Limited-notice tests elicit the most accurate information regarding an individual's knowledge and provides an understanding of protection program readiness. The EA Limited-Notice Performance Test Guide provides specific guidance for conducting LNPTs.

3.2 Special Access Program and Sensitive Compartmented Information Facility Assessments

Limited-access programs, such as special access programs and sensitive compartmented information, are evaluated as focused assessments using lines of inquiry (LOIs) developed for applicable topical areas as described in the appendices of this guide. Departmental and national requirements specific to such programs and special emphasis items determined by the program office or Special Access Program Oversight Committee may also be included. The process as documented in this guide and the associated appendices is used for these focused assessments; however, certain activities are coordinated through the responsible program office and controlled according to program office requirements. Specifically, assessors and members of the management and quality review boards (QRBs) are limited to those who have completed additional access authorization screening, and reports are controlled to ensure only authorized personnel have access to both draft and final reports.

3.3 Timeline

The process for conducting an appraisal can be lengthy and consist of several steps. The main body of this guide focuses on the steps for planning, conducting, documenting, and closing out a large scope MTA, with appendices that provide more detailed information for each specific topical area. Although this integrated appraisal guide focuses on MTAs, the detailed information it provides is also used for other EA appraisals, (i.e., focused, targeted, etc.). Each section describes the differences between large and small scope MTAs and other appraisal types.

Section 4: Planning

Appraisals focus on identifying and executing activities that address the most significant security vulnerabilities faced by the Department to provide recommended actions to the Secretary and other senior managers for use in allocating resources and targeting remedial actions in a timely manner. Continuous coordination and planning with the program office and site management is essential for a successful appraisal and obtaining a mutual understanding of, and ability to be responsive to, each other's position. Much of the detailed planning is accomplished before the appraisal team arrives on site, but planning is an ongoing effort and may continue well into the conduct phase of the activity. All members of the appraisal team should remain flexible and ready to modify plans in response to unexpected circumstances that may arise during any phase of an appraisal.

This section describes the following aspects of the planning process:

- Scoping
- Appraisal plan and memorandum
- Data call
- Performance testing
- Planning meetings
- Integrated schedule
- Document review
- Small scope appraisals

4.1 Scoping

The cooperation and assistance of DOE and NNSA field representatives is essential for ensuring an effective appraisal. Field POCs provide detailed knowledge of the site and systems, arrange administrative and logistical support, expedite appraisal activities, and provide valuable feedback on factual accuracy. Relations between the appraisal team and representatives from the assessed organization must be respectful, open, and professional. Through this cooperation, EA-22 determines the appraisal type (i.e., multi-topic, focused) best suited to accomplish field management and EA's objectives, and the scope of the appraisal activity (e.g., topics evaluated, level of detail, and LOIs). EA-22 uses a collaborative process that includes a series of risk-based factors and areas of interest as identified by program office and field management. Scoping affects all other appraisal phases, feeds the development of LOIs and performance testing, and helps to develop a detailed appraisal plan. Appraisal management may request a pre-scoping data call to support evaluation of the following significant factors:

- Asset characterization and site mission
- Changes in mission, operations or contractor
- Changes in policy
- Historical performance

- Previous EA appraisal results
- Previous EA enforcement results
- Previous internal/external audit results
- Incidents of security concern.

After review of the pre-scoping data call and initial scoping determination, an appraisal project plan is developed, and a one-day site scoping visit may be conducted with the field's Federal and contractor management. The project plan outlines the tasks and due dates for completing the appraisal. The one-day scoping visit provides an opportunity for the Team Chief and Deputy, along with members of the administrative staff and, as necessary, topical area team leads, to meet face to face with site DOE and NNSA line management and contractor personnel to discuss upcoming appraisal activities. Topics of discussion include the appraisal process, tentative scope and focus of the upcoming appraisal (i.e., facilities and operations include and those considered out of scope), site safety and security training requirements, POCs, and work space availability. A scoping packet is typically developed to support the meeting and includes the agenda, appraisal schedule, and summary of recent EA activities at the site. It is in the interest of both EA-22 and the site to approach security appraisals in partnership to ensure that activities result in identifying useful and effective program improvements. Subsequent to the meeting, coordination continues on training, logistics, and developing a POCs list.

Responsibilities for Scoping

Team Chief

- Requests the pre-scoping data call, if necessary (see Attachment 1. Data Call: Pre-Scoping Meeting).
- Coordinates with the deputy and team leads to determine the scope of appraisal and potential performance testing.
- Schedules briefing with applicable program office leadership/manager.
- Schedules onsite briefing with field office manager (if applicable).
- Appoints an EA-22 integrated performance testing POC to coordinate integrated testing activities with the site.
- Develops or designates the development of the scoping packet (see Attachment 3. Scoping Packet Example).

Deputy Team Chief

- Develops project plan (see Attachment 2. Project Plan Example).
- Develops the scoping packet (see Attachment 3. Scoping Packet Example). February 2019

- Distributes the scoping packet and pre-scoping data call to team leads.
- Coordinates training and logistics.
- Develops POCs list and coordinates with the site (see Attachment 4. Point of Contact Listing Template).

4.2 Appraisal Plan and Memorandum

Once the scope has been determined, a site announcement memorandum is distributed approximately 90 days before the start of the appraisal. The announcement memorandum is sent to the site and important program office personnel and provides the dates and any special considerations regarding the appraisal. Subsequently, an appraisal plan is sent to the site. The appraisal plan includes scope, schedule of activities (data collection, performance testing, analysis of results, and report development), team composition, and strategic LOIs. Strategic LOIs are derived from policy requirements (must, shall, will), with a focus on elements identified during the scoping process. Tactical LOIs are also derived from policy requirements and detailed in each topical area appendix. LOIs assist topical area team members and the site in gaining an understanding of site protection programs being evaluated.

Responsibilities for Announcement Memorandum and Appraisal Plan

Team Chief

- Using the most recently approved version, develops announcement memorandum and appraisal plan and submits in the EAShare application.
- Ensures that the most current policies (e.g., DOE directives, supplemental directives, national requirements) are reflected in the strategic LOIs and that the LOIs are consistent with the approved scope of the appraisal.
- Distributes announcement memorandum and plan to team leads.
- Transmits site announcement memorandum and appraisal plan.
- Updates in-briefing slides and transmits to site (cc: EA-22 Headquarters Admin).
- Coordinates the development of the resource list (via email).
- Coordinates clearance transfer/training needs with site.
- Requests computer support via email to the contracting officer's representative.
- Coordinates with augmentees/observers.
- Develops pre-briefing slide and schedule meeting with EA (see Attachment 5. EA-1 Pre-briefing Slide Template).

Deputy Team Chief

- Supports Team Chief.
- Reviews team announcement and attachments.

Topical Area Team Leads

• Provide topical area input to the Team Chief for the appraisal plan.

- Ensure that most current policies (e.g., DOE directives, supplemental directives, national requirements) are reflected in the appraisal plan, data call, and strategic/tactical LOIs (see Appendix G, Topical Area References).
- Distribute the appraisal plan, data call, scoping packet, and pre-scoping data call documents received to team members.

4.3 Data Call

The data call supports planning activities prior to onsite data collection. Requested submission dates may vary to support specific phases of the appraisal depending on the scope of activities. As described in Section 4.1, Scoping, management may request documents as part of the scoping process and if integrated performance testing, force-on-force, or other topical area limited-scope testing is planned, documents may be requested to support test planning. The remaining documents are requested as part of an integrated and topical area-specific data call supporting planning week activities. The integrated data call excludes any documents already received as part of previous phases and includes items that may be of interest to multiple topical area teams (i.e., survey reports or corrective action plans for previous EA findings). The integrated data call is supplemented by topical area-specific requests. Additionally, the integrated data call includes a request for a site-prepared presentation during the in-briefing that includes an overall description of the security program and the current organization structure, any changes to the program since the last EA MTA, and the operational status of the facility (including any process activities that may have changed the characteristics of existing material types or produced new material types). The briefing should also include a list of approved and pending equivalencies/exemptions requests and the status of corrective action plans for addressing findings from local surveys and previous EA appraisals. Prior to submission of the appraisal-specific data call, a review is necessary to ensure that only pertinent documents are requested early and that there is no duplication of requested documents. The integrated and topical area-specific data call requests are typically designated into two groups: (1) materials requested for review during the planning process, and (2) other materials that should be available for onsite review. The appraisal team reviews the submitted data call items during the Headquarters planning meeting and, depending on the results of the initial review, additional data and documentation may be requested.

Responsibilities for Data Call

Deputy Team Chief

- Provides topical area team leads with suspense dates for the data call.
- Reviews data call request to ensure that there is no duplication of requested documents.
- Finalizes and transmits the data call (via email).

Integrated Performance Testing POC

- Coordinates with the topical area team leads and EA force-on-force test director to update the data call.
- Provides the updated data call and test plan criteria to Deputy Team Chief.

Topical Area Team Leads

• Review/update the integrated and topical area-specific data call (see Attachment 6. Data Call: Integrated Planning).

4.4 **Performance Testing**

When compared to other data collection tools and methods, performance testing is the most labor and time intensive. Performance testing places the greatest demands on the resources of the assessed site and requires the highest degree of coordination and planning. Performance testing also presents the greatest potential for generating safety or security issues. Thus, performance tests must be carefully planned and coordinated prior to arrival on site to ensure the most efficient use of time and resources. This planning and coordination process continue after the appraisal team arrives at the site, often up to the point the test is conducted. Determining how many and what type of performance tests to perform is usually based on scoping protocols and information identified during the appraisal planning process. EA-22 implements varying types of performance tests that may include integrated, force-on-force, limited-scope, and knowledge testing. Each type of performance test is briefly described below:

Integrated Tests

To aid in achieving the greatest benefit from performance testing, where possible, EA adopts an integrated testing approach, focusing on the dynamics of interaction between the system elements, rather than the performance of a single element. This approach tests the overall function of a system with one stimuli. For example, the test may begin with a balanced magnetic switch door alarm, followed by a protective force response, leading to a safeguards appraisal, and ending with an SNM inventory. If integrated testing is included in the appraisal, the Team Chief assigns a single EA performance testing POC responsible for coordinating with the topical area team leads, EA force-on-force test director, and site POCs on the development of integrated test objectives, review of associated test plans and safety risk assessments, schedule, and logistics of anticipated testing activities.

• Force-on-Force Tests

Large scale MTAs often include force-on-force performance testing of the protective force. This testing requires extensive coordination and resources and provides the greatest amount of information on protective force emergency response capabilities. As the start of the appraisal activity approaches, if large-scale force-on-force exercises or other complex performance tests are planned, the EA designated performance testing POC coordinates with the designated test director on the objectives, scope, and schedule. The EA designated test director and other personnel as necessary will conduct a performance test scoping visit with site Federal and contractor personnel. The objective of the visit is to identify valid and realistic scenarios/tests and establish performance criteria. A second planning meeting is also conducted to adjust test scenarios, receive briefings, conduct safety walkdowns, and obtain approval from the Officially Designated Federal Security Authority for scenarios, draft test plans, and safety risk assessments. Once scenarios and planning are complete, the EA test director contacts the CAT and engagement simulation systems support coordinators to discuss the number of Field CAT members and types and quantities of equipment needed for the test (see Appendix C, Protective Force, for additional information).

• Limited-scope Tests

Topical area team leads may identify limited-scope testing that can be either announced or unannounced. This type of testing must be as realistic as possible and designed to test operations and procedures, verify implementation of a policy requirement, or verify the requisite knowledge or skill to perform a specific task. For tests within a subtopical area (e.g., material control and accountability physical inventory, protective force firearms qualifications), the appraisal team lead is responsible for ensuring safe conduct and coordination with the EA performance testing POC, other topical area team leads, and the site. The EA performance testing POC may conduct a performance test scoping visit with the site, during which the EA performance testing POC coordinates the objectives, evaluation criteria, and scheduling of all limited-scope testing. Onsite data collection activities may be authorized during this planning meeting, but only after approval from EA senior managers (see Appendices A-F for more on topical area-specific performance testing).

<u>Knowledge Tests</u>

Knowledge testing may include formal written tests or less formal interviews that use a structured series of questions to ensure that staff members are knowledgeable of their duties and responsibilities. Both formal and informal knowledge testing requires substantial planning to ensure that questions and expected answers are consistent with site training and procedures. Personnel should not be tested on information they have not been trained on or have not implemented. Formal knowledge tests and answer sheets must be handled as TA information to ensure integrity of the results. Informal question and answer interviews, although not considered TA information, must also be planned and conducted accordingly to ensure consistent application (i.e., multiple assessors asking same or similar questions) and that expected responses are consistent with site procedures and training.

An important step in preparing for performance tests is assignment of personnel responsible for coordinating and overseeing performance testing activities (e.g., performance testing POC, test director, team lead). These personnel facilitate accurate communication, ensuring that the likelihood of mixed directions or tasks by the site is reduced. Such coordination includes specifically identifying the skill, capability, or element(s) to be tested and clearly defining the test's objective(s) to ensure execution of the most appropriate test. The goal of performance test planning, regardless of test type, is to anticipate and prepare for activities necessary to conduct the highest quality testing possible with the resources available. Although focus is typically on the highest consequence activities, appraisal teams also consider the finite amount of time available to plan activities, collect data, and validate potential deficiencies. Therefore, tests are selected that can reasonably be completed within the allotted time and sometimes require performing fewer tests or multiple iterations of the same test.

When planning force-on-force performance tests or other testing that requires limited notice of test participants, site POCs are formally identified as TAs. The TAs' knowledge of the site and programs helps to ensure that test conditions realistically reflect site operations and ensures that the test criteria and objectives can be executed. Designated EA personnel, depending on the type of test, coordinate with designated TAs on the submission of non-disclosure forms to ensure that the integrity of the tests is maintained. Throughout the planning stage EA emphasizes that the number of TAs must be kept to the minimum necessary to conduct a performance test, and that all test documents are marked with a bolded warning border that reads "Trusted Agent Use Only, Not to be Disseminated." The nature of the limited-notice testing requires that the persons being tested (or those supporting the tests) are not notified until immediately before the test. Generally, site personnel and evaluators and/or equipment are placed in situations where test responses can be observed while potential safety and routine site operational concerns are addressed. However, if notification is essential to safely conducting the test, only pertinent site personnel should be forewarned of the test. Methods to mitigate the notification of personnel before testing include conducting an array of tests in a random order at different locations with varied personnel or conducting a test without pre-designating who or what is tested. Examples include coordinating the inventory of a site's SNM without announcing which material balance areas or containers will be inspected or not preidentifying which containers will be inspected for tamper-indicating devices. Additionally, as part of planning for any test, the EA POC initiates contact with the designated program office and facility/site, establishes initial TAs where necessary, and discusses the process, topical areas included, and coordination of the performance tests. This verbal communication is followed by an email to the Federal field office POC to ensure accurate communication.

Per DOE directives, sites are required to establish and maintain an acceptable level of performance ensuring that all elements of a security program are workable and function as designed. As a result, sites/facilities have established procedures for planning, coordinating, and conducting performance tests throughout the year. Test objectives could be related to equipment (e.g., does the alarm sensor send an alarm to the panel?), or personnel response actions (e.g., does the protective force assess, communicate, and respond to the alarm condition according to procedures?). A common objective for all performance tests is an evaluation of the site's ability to plan and conduct the tests. To both evaluate the performance of the protection system and the site's ability to conduct adequate testing, EA leverages pre-written and approved test documents, where possible. If a review of

the local procedures, test plans, and safety risk assessments identifies that EA test objectives cannot be achieved, EA and site personnel coordinate on development of new test plans. EA management may sometimes authorize the development and conduct of EA test plans and risk assessments designed to demonstrate alternative or defeat testing methods and techniques.

An important step in the planning process is the development of test description documents and data collection forms. A test description document is prepared that describes the objects, tasks, conditions, and standards for each test. This document is used to coordinate with site personnel and ensure that preexisting and newly developed test plans are adequate to achieve the expected results. In preparation for evaluation of the conduct of test, EA develops data collection forms that outline the specific requirements from DOE policy, National regulations, and site procedures. This includes clearly stating the type of test (operability or effectiveness) and the conditions for the test. An operability test could be related to equipment (e.g., does the alarm sensor send an alarm to the panel?) or a protective force weapon being pulled from duty and test fired by an armorer or instructor to determine whether it is functioning. The operability test is designed to determine whether the system or component is working, but not how well it is working. For example, an operability test for a balanced magnetic switch confirms that opening the door results in an alarm. The effectiveness test is conducted to determine whether systems are working as expected, separately or in coordination, to meet protection program objectives. For example, a balanced magnetic switch effectiveness test confirms that an alarm is generated when the door is opened with less than a 1-inch separation between the switch and the magnet mounted on the door and that the alarm is received at the alarm monitoring station. The objective of an effectiveness test may also assess personnel response actions (e.g., does the protective force assess, communicate, and respond to the alarm condition according to procedures and/or prescribed times?). EA may request that effectiveness tests be integrated with one or more topical areas (e.g., protective force, physical protection systems, and material control and accountability).

Data collection forms for each test are shared with the site POCs or TAs. As previously stated, the most important part of effective performance testing is planning, and the greatest emphasis in planning involves creating robust test plans. The site prepares the test plan(s) required to conduct the tests and then forwards the test plans and associated safety risk assessments to EA for review. Except for force-on-force specific exercises that required officially designated Federal security authority approval, tests and associated scenarios may not reflect specific vulnerability assessment-related scenarios. Unless the element(s) being tested are identified as essential elements in the performance assurance program plan, there is no required plan format; however, best business practice and NTC course curriculum suggest, at a minimum, that test plans include the following elements:

- Purpose and scope of the testing
- Objective(s)
- Tasks, conditions, and standards
- Sequence of activity
- Evaluation criteria (pass/fail)
- Resources required (including people, equipment, and time)
- Safety assessment (required for all protective force testing).

During review of the test plans, EA personnel ensure that execution of the plan as written will result in meeting the performance objectives as stated on the test description document and that control measures have been identified to ensure that the testing will be conducted safely. This review also identifies whether any EA personnel require special training and personal protective equipment for site/facility access, as well as what is supplied by the site and what team members are expected to bring (safety shoes, glasses, cold weather gear, etc.). To ensure that testing leads to valuable and valid information, the conditions under which performance tests are conducted must be as realistic as possible, and any necessary constraints and artificialities must be designed to have a neutral effect on performance. Review of the safety risk assessment(s) determines whether the identified controls are appropriate to mitigate any potential safety hazards or risks associated with each of the test actions indicated by the task description. If testing could result in personnel positioned in unusually high-risk positions or if the safety assessments are not thorough enough to address the areas of concern, the EA personnel coordinate February 2019

with the site to address the concerns. If the concerns are not adequately addressed prior to conducting the tests, the Team Chief/Deputy Team Chief is notified and a determination is made on either postponing or terminating the test. Additionally, if the EA management team determines that the artificialities and/or restrictions associated with a planned test are so severe as to jeopardize the realization of valid results, alternate methods or other forms of testing should be considered.

Responsibilities for Performance Testing

Team Chief/Deputy Team Chief

- Designates integrated testing POC.
- Makes sure all team members are aware of "stop work authority" and makes final determination on either postponing or terminating testing based on review of site plans and safety risk assessments.

Integrated Performance Testing POC

- Coordinates with topical area team leads on the number and scope of integrated tests to perform.
- Coordinates with the EA force-on-force test director to ensure that all testing activities are supported and coordinated with site TAs.
- Initiates contact with the designated program office and site management on the establishment of TAs, scope of integrated testing, and schedule of activities.
- Develops a test description document (see Attachment 7. Test Description Document Template).
- Coordinates with topical area team leads to develop a data collection form for each integrated test (see Attachment 8. Data Collection Form Example).
- Briefs site TAs on specific test objectives and evaluation criteria and coordinates on the approach for conducting the tests.
- Reviews site test plans and safety risk assessments to ensure that test objectives can be safely and effectively achieved and can recommend postponing or terminating testing based on review of site plans and safety risk assessments.
- Obtains signed TA forms, where applicable (see Attachment 9. Trusted Agent Non-Disclosure Form).
- Verifies that the site has received all necessary information to support EA evaluation of integrated testing, such as access to the site (including any areas/buildings necessary for testing purposes), and that all required training has been completed.

Test Director

- Coordinates with the integrated testing POC on schedule of activities.
- Coordinates with CAT and engagement simulation systems support program coordinators.
- Performs testing as described in Appendix C, Protective Force.

Topical Area Team Leads

- Support the integrated testing POC on the number and scope of integrated tests and provide information and support for the development of the integrated test description document and associated data collection forms.
- Develop topical area test description document and associated data collection forms for each performance test (see Attachments 7 and 8).
- Initiate contact with designated field office management on the establishment of TAs, scope of testing, and schedule of activities.
- Brief the site POCs/TAs on specific test objectives and evaluation criteria and coordinate on the approach for conducting the tests.
- Obtain signed TA forms, where applicable (see Attachment 9. Trusted Agent Non-Disclosure Form).
- Review site test plans and safety risk assessments to ensure that test objectives can be safely and effectively achieved.
- Verify that the site has received all necessary information to support EA evaluation of integrated testing, such as access to the site (including any areas/buildings necessary for testing purposes), and that all required training has been completed.

4.5 Planning Meetings

The planning meeting is usually conducted at DOE Headquarters in Germantown, Maryland, but can be held on site depending on management discretion. Each topical area team reviews the submitted data call items using the planning worksheet, identifies topical area strengths and weaknesses, validates the topical area scope, selects and schedules onsite data collection methods, and may participate in information sharing with the Associate Under Secretary for the Office of Environment, Health, Safety and Security (regarding potential policy concerns), applicable program office, and NTC (regarding site training history and concerns). Topical teams may also identify additional data call and support requirements that are communicated to site POCs. Personnel with access to the S&S Information Management System obtain printouts of site Federal and contractor information regarding the incidents of security concern, findings and associated corrective actions, and Contractor Security Classification Specifications that are shared with all topical area teams. Additionally, the Deputy Team Chief coordinates with the Office of Enforcement (EA-13) on site-related information that may be pertinent to the appraisal as well as data that EA-13 has gathered on information security and incidents of security concern. Topical area teams may also coordinate with other EA offices and review applicable documents (e.g., EA-13 website) for additional information. During the planning process, the topical area team leads and assessors assign responsibility for each subtopical area and discuss the level of effort between documentation and performance-based reviews.

Responsibilities for Planning Meetings

Team Chief/Deputy Team Chief

- Conducts a briefing for the appraisal team on the site's performance assurance program and essential elements.
- Ensures that the entire data call (including classified) was received and distributed to team leads for review.
- Coordinates with the site program office, field office, Office of Policy, NTC, and EA-13 as necessary.
- Coordinates the end-of-day team meetings.

- Becomes familiar with the results of previous appraisal activities (e.g., previous MTA appraisal reports, LNPT reports, database reviews of the S&S Information Management System).
- Reviews the objectives and parameters outlined in the appraisal plan, management guidance, and expectations with topical area team leads.
- In coordination with topical area team leads, ensures that strategic and tactical LOIs are vetted with assessors, are current, and that data call and team size/resources are appropriate for the upcoming appraisal.
- Ensures a copy of the unclassified data call is available via EAShare.
- Ensures a copy of the classified data call is available via the Enterprise Security Network.
- Finalizes the POC list with site and topical area team leads.
- Identifies classified information that will be shipped to the site.

Topical Area Team Leads

- Confirm assessors' responsibilities.
- Prepare for and support the end-of-day team meetings.
- Ensure that the entire data call (including classified) was received and report status to the Deputy Team Chief via EAShare or classified channels.
- Coordinate communication (e.g., teleconference) with the site POC (Federal and contractor as applicable) to discuss omitted/additional data call documents that can be reviewed during onsite activities.
- Distribute the unclassified data call to team members as early as possible prior to planning week.
- Ensure that assessors are familiar with the scope of the appraisal, management guidance and expectations, and results of previous appraisal activities related to the upcoming appraisal.
- Ensure assessors are using the latest planning worksheets in review of the data call.
- Coordinate with assessors to ensure that travel information has been received and travel reservations have been made as detailed in the Site Team Announcement memorandum email.

Assessors

- Support topical area team leads and conduct assigned duties.
- Review data call using the latest version of the planning worksheet (see Section 4.7, Document Review).

4.6 Integrated Schedule

During planning week, a detailed appraisal schedule is prepared for onsite activities, including time for continued document reviews, conduct of interviews, performance testing, and facility tours. This integrated schedule facilitates communication internally between topical area teams and externally with the site and is designed to reduce duplication and promote efficiencies. The process begins with the topical area team leads creating a draft schedule based on previous appraisal activities and coordinating with their respective site POCs. The EA-22 performance testing POC also develops a schedule of planned integrated testing after coordination with the site. Discussions with the site include

additional logistical arrangements necessary for the appraisal, such as access to security areas, additional security areaspecific training, and facility tour logistics.

The appraisal may occur when the facility is performing certain activities (e.g., a physical inventory, firearms qualifications), so it is appropriate for the topical area team lead to discuss the timing of the appraisal with the POCs. Observing facility personnel performing planned activities minimizes the impact of the appraisal on the facility and provides valuable performance appraisal information to the appraisal team. As part of this process, the topical area team lead should request that the facility provide a schedule of anticipated activities that the site plans to conduct during the appraisal. This enables the appraisal team to plan the observation of routine activities and site-generated performance tests and to develop additional performance tests to be conducted by the team during the appraisal. To facilitate communications and conflict resolution, a notation should be included in the comments section of the integrated schedule that differentiates EA-22 requested activities from site activities that are already scheduled and being observed by EA-22 personnel.

The Deputy Team Chief or designee is responsible for creating the final draft of the integrated schedule. Once each topical area team has modified the schedule and coordinated with other teams and site POCs, it is submitted to the designated writer (typically no later than Wednesday of planning week) and combined into a single integrated schedule that is submitted to the Deputy Team Chief. The Deputy reviews the final draft and coordinates with the site to ensure that conflicting activities are resolved. During onsite activities, the integrated schedule is updated by the site as necessary, and a copy is forwarded to an EA field administrative coordinator for dissemination to management and each topical area team lead.

Responsibilities for Integrated Schedule

Deputy Team Chief

- Creates a draft integrated schedule and provides it to topical area team leads.
- Reviews and integrates the revised topical area team schedules into one schedule (see Attachment 10. Integrated Schedule Template).
- Coordinates the final integrated schedule and in-briefing expectations with site POC.
- Coordinates changes and revisions to the final integrated schedule with the site POC throughout the appraisal.

Topical Area Team Leads

• Coordinate with other teams and site POCs to develop the onsite schedule of activities for topical area teams.

Designated Primary Writer

• Supports the Deputy Team Chief in developing activities as needed.

4.7 Document Review

The goal of planning is to anticipate and prepare for activities necessary to conduct the highest quality appraisal possible with the resources available. To that end, it is useful to focus the planning process on a series of objectives:

- Understanding the characteristics of the S&S program, including its size, composition, organization, and mission.
- Having a general familiarity with how personnel are trained, managed, and equipped.

- Understanding the operating environment.
- Reviewing the subtopical areas to be assessed and determining the specific areas of focus for appraisal activities, and the specific data collection methods to be used, including any performance tests to be conducted.
- Reviewing facility surveys, self-assessments, and corrective action(s) taken to address previous appraisal findings and becoming familiar with the results of previous appraisal activities, i.e., previous MTA appraisal/inspection reports and LNPT reports. Information from these reviews is shared with the program planning and management team to assist in determining whether the overall self-assessment and corrective action programs are adequately implemented (see Section 8.1, Systems Approach, for additional details).

Planning worksheets are used during document reviews as a mechanism for ensuring performance/compliance with requirements. Planning worksheets are specific to document reviews and provide information useful in determining LOIs for interviews and observations during onsite data collection activities. An interview form is also available to assist assessors in planning the interview and ensuring the best use time for both Federal, contractor, and EA-22 personnel. The information generated using this form supports the appropriate allocation of/request for personnel and time on the integrated schedule.

Responsibilities for Document Reviews

Topical Area Team Leads

• Review and disseminate to the assessors the latest versions of the applicable data collection forms and planning worksheets.

Assessors

- Conduct requirements-based evaluation of provided input (see Attachment 11. Planning Worksheet Template).
- Prepare interview form (see Attachment 12. Interview Form Template).

4.8 Small Scope Appraisals

Planning for small scope appraisals, which can include all appraisal types (e.g., multi-topic, focused, targeted, etc.), may not encompass all elements described in this section. The appraisal teams are smaller in size and may be led by a team lead rather than a Team Chief and Deputy Team Chief. Therefore, applicable Team Chief, Deputy Team Chief, and team lead responsibilities in previous paragraphs are all the responsibility of the appraisal team lead. Other differences in each aspect of the planning phase are as follows:

- <u>Scoping</u> Small scope appraisals, such as field intelligence element or information security appraisals, are planned annually through coordination with the applicable agency and program office (see EA-22 Appraisal Protocols for additional details). These appraisals as well as other small scope appraisals typically do not have an appraisal project plan, and scoping packets and onsite meetings may not be necessary. Coordination with the site begins approximately 30-days before arrival on site and POCs are established.
- <u>Appraisal Plan and Memorandum</u> All appraisals have an appraisal plan and memorandum; however, the plans may vary based on management discretion and the complexity and scope of the appraisal. For focused appraisals supporting site appraisals under a specific agency or program office, an annual plan is developed that describes the process used for conducting all the applicable appraisals that year. Other individual appraisals have site-specific plans that are disseminated to the site and program office in a manner similar to how plans are disseminated for large scope MTAs.

- <u>Data Call</u> Based on the scope of the appraisal, documents are requested to support evaluation of performance and compliance. If the majority of the documents are classified or of a sensitive nature, appraisal teams may not receive a data call prior to arrival on site. If information is requested, the process for large scope MTAs is used (see Section 4.3, Data Call, for additional details).
- <u>Performance Testing</u> Small scope appraisals may also involve the conduct of performance testing (nonforce-on-force). If testing is included in the scope of the appraisal planning, aspects described earlier are implemented (see Section 4.4, Performance Testing, for additional details).
- <u>Planning Meetings</u> Small scale appraisals conduct remote planning activities and do not include a team planning meeting. Activities performed during the planning meeting, (e.g., data call review, site coordination) are performed via email and conference calls between the team lead and team.
- <u>Integrated Schedule</u> The team lead, through coordination with the site, determines the need for a schedule of activities for small scale MTAs and other appraisal types. Typically, if multiple facilities are involved and performance testing will be conducted, a schedule of activities is developed to facilitate communication internally between team members and externally with the site and designed to reduce duplication and promote efficiencies.
- <u>Document Review</u> All appraisal types include document reviews, and teams are expected to use applicable tools described in this guide (see Section 4.7, Document Review, for additional information).

Responsibilities for Small Scope Appraisals

Team Chief/Deputy Team Chief/Team Lead/Assessor

• Performs all applicable responsibilities identified in Sections 4.1 - 4.7.

Section 5: Conduct

Although EA-22's analysis of data begins during pre-appraisal activities, data collection activities during the conduct phase provide more information, allowing for a greater focus on emerging performance and compliance trends. Assessors conduct themselves in a professional manner, consistent with EA-22 appraisal protocols, and ensure that if conflict resolution is required (e.g., hostile environment/engagement during an interview), they immediately postpone any further discussion with the person or persons and immediately report to the Team Chief and Deputy. Thereafter, the appropriate parties may reconvene to further discuss and resolve the contentious issues.

Data collection usually occurs during one or more onsite trips. Document reviews begin during the planning phase as described in Section 4 and continue during the onsite conduct phase. Most data collection techniques have compliance and performance evaluative elements, and application of the full spectrum of techniques is necessary for an effective appraisal. The goal when conducting an appraisal is to accomplish all data collected daily; and analyze the data periodically to ensure information has been obtained that is necessary to base the results on before report writing.

This section describes the following aspects of the conduct process:

- Workspace and team logistics and in-briefing
- Tours and observations
- Interviews
- Performance testing

- Informal validation
- Team and manager meetings
- Small scope appraisals.

5.1 Workspace and Team Logistics and In-briefing

An in-briefing is conducted on the first day, and depending on location size and space, all team members are invited to attend. Each topical area team is assigned onsite workspaces that vary in size but have multiple classified and unclassified workstations. The field administrative staff coordinates and maintains control of classified information and media. Additionally, emails that contain instructions for training, access control, maps, parking, etc., are periodically distributed before arrival on site. While on site, assessors will comply with security-related postings and placards, as well as rules regarding prohibited articles. Team members will comply with all information security and cyber security policies regarding the use of classified and unclassified Information. When in doubt about any regulation or policy, assessors should consult topical area team leads or Deputy Team Chief for clarification. If problems occur, or if local requirements alter essential data collection activities, the topical area team lead and Deputy Team Chief are notified as soon as possible. At the completion of onsite activities, the topical area team leads discuss process improvements to include revision of the data call, and lessons learned with their teams. This information is shared with the Deputy Team Chief through either a formal lesson learned meeting or informally in discussions throughout the appraisal.

Responsibilities for Workspace and Team Logistics

Team Chief/Deputy Team Chief

- Coordinates team introductions with team leads before the in-briefing.
- Conducts in-briefing.
- Monitors daily schedule and assists teams when necessary.
- Meets with topical area team leads at the end of the appraisal on process improvements, including revision of the data call, and lessons learned.

Topical Area Team Leads

- Meet with assessors prior to or at the beginning of the appraisal to assign responsibility for team tasks/logistics (see Attachment 13. Multi-Topic Assessment Team Checklist).
- When requested, introduce assessors during the in-briefing.
- Ensure accountability of classified hard drives and Iron Key devices each day.
- Monitor daily schedule and assist teams when necessary.

Assessors

- Stand when introduced during in-briefing.
- Retrieve, maintain accountability of, and return classified hard drives and Iron Key devices each day.
- When leaving the workspace, sign out and document onsite and offsite locations, providing POCs, telephone number, and expected time of return.

• If using site-provided vehicles, sign out and document expected time of return.

5.2 Tours and Observations

Tours of the facility and observations of site operations provide data useful in evaluating the effectiveness of S&S programs. Tours allow assessors to familiarize themselves with the site and facility, observe operations, verify that the S&S programs are implemented and functional, and discuss activities with operations personnel. Observations are a good way to see how personnel perform routine duties. Observations may be either deliberate or ad hoc. For example, entry control procedures may be observed for 30 minutes during a shift change to see whether proper procedures are followed; however, entry control procedures may also be observed every time the assessor passes through or by an entry control point. The time and location of deliberate observations should be carefully planned to provide POCs sufficient data and should be limited to instances where the activity to be observed will occur. It is a waste of time for an assessor to stand around in the hope that something will happen. Entry into material access areas may require additional logistical efforts, such as 24-hour advance notice, issuance of dosimeters, facility orientation briefings, being placed on the "Plan of the Day," personnel protective equipment and clothing, approval of medical devices, and limiting hand-carried items. Coordination to ensure compliance with entry requirements is essential. In most cases, key areas will be visited more than once, so ongoing facility access will be required.

The appraisal team should attempt to minimize impact on the facility by asking the facility what activities will be occurring during the appraisal and by planning the appraisal accordingly. Observation of ongoing activities is cost effective and has a lower facility impact. However, if specific activities are not scheduled while the appraisal team is on site, assessors may request these activities to be performed. These requests are coordinated during the planning phase, and assessors cannot wait until the team is on site. Additionally, assessors should coordinate tours and observations with other topical area teams to minimize intrusion into the facility's work routine.

Responsibilities for Tours and Observations

Deputy Team Chief/Topical Area Team Leads

- Schedule tours and request to observe work activities as part of the integrated schedule during the planning phase.
- Coordinate with EA-22 personnel to ensure they are prepared and arrive on time.

Assessors

- Coordinate with topical area team leads to request tours and observation of work activities as part of the integrated schedule during the planning phase.
- Prepare for appraisal activities and arrive on time.
- Minimize impact on site personnel and operations (e.g., limit questions and lengthy discussions until after the tour) where possible.

5.3 Interviews

Interviews with Federal and contractor management and supervisory and operations personnel are important methods of data collection. Many DOE requirements involve establishing, publishing, and enforcing policies and procedures and maintaining required records. In conjunction with document reviews, interviews provide a means of rounding out the picture of management activity and for identifying aspects of management performance that ordinarily escape documentation. Interviews are not always formal and frequently take the form of discussions during tours or performance tests. Assessors should take every opportunity to ask questions of site personnel, as

these individuals can usually provide the appraisal team with essential information that will frequently support or clarify the documentation.

Interviews provide the assessor with valuable information regarding an individual's understanding of policies, procedures, and responsibilities. Discussions with personnel who are involved with hands-on operations can indicate whether policies and directives are effectively communicated and implemented. Interviews are an important source of information, so they should be conducted with deliberation and purpose. Consider the following when preparing for and conducting an interview:

- Know what questions will be asked. Using the interview form developed during planning is an excellent mechanism to ensure adequate planning and conduct of an effective interview.
- When several assessors are conducting interviews simultaneously (e.g., protective force post checks or material balance area custodian interviews), a list of core questions should be used to ensure consistency in all interviews. However, this list does not restrict assessors from asking additional questions or pursuing a line of questioning. The assessment team should be cautious not "gang up" on those being interviewed.
- Conduct interviews in a conversational and non-threatening manner. Much of the interview is essentially an oral knowledge test, and the interviewee will consider every question to be a test.
- Although each assessor is conducting the interview with a pre-established set of questions, the questions can be phrased and rephrased, as necessary, to ensure that the interviewee understands the question and the question elicits the desired information. The goal is to evaluate the level of compliance and performance of the programs through the individual's perception or understanding of the subject matter, which may vary from person to person.

Responsibilities for Interviews

Assessors

- Prepare using tools described in this guide.
- Take notes and document responses.
- Use a conversational tone and ensure that participants understand the line of questioning.

5.4 **Performance Testing**

The conduct of performance testing involves collecting and validating data. The conduct of test activities and site performance is evaluated per predetermined criteria as documented on performance testing data collection forms created during the planning phase. Results of performance testing are communicated through on-the-spot validation with the site POCs or TA(s). Tests simulate realistic conditions to the extent possible and provide evidence regarding the effectiveness of the S&S system/program. Unfortunately, safety concerns, time and resource constraints, and the heightened security posture that results when an appraisal is under way frequently minimize the ability to establish and simulate realistic conditions. Therefore, when a problem is detected, the assessor must sufficiently investigate the deficiency to determine whether it is a result of testing artificialities or whether it is an isolated error or a trend symptomatic of poor training, improper procedures, poor management (perceived importance of safeguards activities), or other systemic cause (see topical area appendices for additional information on testing considerations specific to each area).
Responsibilities for Performance Testing

Integrated Performance Testing POC

- Finalize integrated test plans and logistics with site POCs/TAs and the EA force-on-force test director prior to execution of tests.
- Coordinate the review of the safety risk assessment with the EA safety representative.
- Maintain control of knowledge tests, answer keys, and, when applicable, test scenarios.
- Ensure use of data collection forms to evaluate testing.

5.5 Informal Validation

Continuous validation is the process by which EA ensures the factual accuracy of collected data and ensures communication of identified deficiencies, and their impacts, to responsible managers and organizations. Informal validation occurs on site during the conduct phase of the appraisal. Formal validation is performed as part of the post-appraisal activities in the form of a 10-day comment period (see Section 7.1, Formal Validation, for additional details). Topical area teams conduct informal validation of data collection results (strengths and weaknesses) as soon as they occur (i.e., on-the-spot validation), at the end of the day (daily validation), and near the end of appraisal execution (factual accuracy). The communication with and information conveyed to site personnel must be accurate, clear, concise, and respectfully conveyed. The information communicated in the daily validation with site Federal and contractor POCs is also reported in the daily bullets, including communication for areas of concern (see Section 5.6, Team and Manager Meetings, for additional details). The Team Chief and Deputy Team Chief use these daily bullets to validate the previous day's information in morning meetings with field Federal and site S&S officials, ensuring that site POCs and their managers are aware of the data collected.

Effective on-the-spot validations are particularly important when conducting performance tests to ensure that all personnel involved saw the same thing or that varying interpretations/perceptions of the results are understood. On-the-spot validations are also particularly critical because of the number of people who can be involved in various locations. There may be unique challenges associated with daily validation of performance testing because of the tendency for testing to extend past normal working hours, moving daily validation to the next morning. Therefore, assessors must take care to track significant information, considering potential classification considerations, covered in on-the-spot validations for accurate dissemination during the daily validation. Daily validation can occur at one meeting with all applicable topical area team members and site POCs at the end of each day or with just the topical area team lead and writer and site Federal and contractor POC. Finally, a summary validation may be conducted with site Federal and contractor personnel to discuss the strengths and potential weaknesses and may also include the opportunity for site personnel to read the draft report. The factual accuracy review occurs when data collection activities are completed and management review board (MRB) and QRB comments have been incorporated into the draft report (see Section 6.3, Reviews, for more information).

Responsibilities for Validation

Deputy Team Chief

• Ensures that daily validation with site Federal and contractor POCs is reported in daily bullets and includes communication of areas of concern.

Topical Area Team Leads/Assessors

• Conduct on-the-spot and daily validations with site Federal and contractor POCs.

February 2019

• Ensure that the information communicated to and validated with the Federal and contractor POCs is consistent with the information reported in the daily bullets.

5.6 Team and Manager Meetings

End-of-day team meetings are an opportunity to communicate and integrate topical area team data collection results and highlight important points and potential concerns for the appraisal team management's awareness. Prior to team meetings, each team provides the field administrative coordinators with narrative bullets outlining their daily activities. These bullets must be incorporated into a single bulleted document, and the sensitivity level should not exceed Controlled Unclassified Information. Each topical area team leads conduct a brief of their respective bullets, summarizing data collection activities and results for the day. When briefing team management, topical area team leads indicate which of their topical area summary bullets were validated with the site. After the end-of-day meeting, senior EA managers and staff members receive the final version of the bullets. The bullets are used during a morning manager's meeting to discuss the progress of appraisal activities and potential concerns, as well as to ensure that the appraisal team's information and the site's information regarding key data collection results are consistent.

Responsibilities for Team and Manager Meetings

Deputy Team Chief/Topical Area Team Leads

• Ensure that the information communicated to and validated with the Federal and contractor POCs is consistent with the information reported in the daily bullets.

Topical Area Team Leads/Assessors

- Provide daily bullets to the topical area team writer by the required timeline to support the end-of-day team meeting.
- Adhere to the EA-22 Guiding Principles for Report Writing when developing daily bullets.

5.7 Small Scope Appraisals

The conduct of small scope appraisals encompasses all elements described in the conduct section, with a few variances as determined by management. As with the planning phase, if the appraisal does not have a Team Chief or Deputy Team Chief, those applicable responsibilities are the responsibility of the appraisal team lead.

Responsibilities for Small Scope Appraisals

Team Chief/Deputy Team Chief/Team Lead/Assessors

• Perform all applicable responsibilities identified in Sections 5.1 - 5.6.

Section 6: Report Writing

The primary tasks necessary to complete report writing include an analysis of results with consideration for integration with other topical areas, determination of strengths and weaknesses, development of opportunities for improvement, development of a draft report to include executive summary and topical area appendices, development of a one-page bottom line summary, conduct of management and site reviews, and a closeout briefing.

This section describes the following aspects of the report writing process:

• Analysis of results

February 2019

- Draft report
- Reviews
- Documentation
- Closeout briefing
- Small scope appraisals.

6.1 Analysis of Results

The objective of EA-22 appraisals is to assess the extent to which DOE sites comply with and perform current program requirements. EA-22 appraisal activities emphasize an approach that builds on both compliance and performance measures to make the most accurate evaluation of the effectiveness of the S&S program. While analysis is an ongoing process during all phases of an appraisal, it culminates during the reporting phase. Analysis involves a critical review of all data collection results, particularly any identified program strengths or weaknesses, and leads to logical, supportable conclusions regarding the individual and cumulative impact of appraisal results on the ability of the S&S program to accomplish its mission requirements.

When analyzing the data collected, it is important to consider both the individual elements of the S&S system and the system as a whole. Failure of a single element does not necessarily mean that the S&S system failed. The analysis process involves the critical consideration by topical area team members of all appraisal results, particularly identified strengths and weaknesses. Analysis will lead to a logical, supportable conclusion regarding how well the requirements are being met and whether the intent of DOE policy is realized. If more than one subtopical area has been assessed, a workable approach is to analyze each subtopical area individually and integrate the results of the individual analyses to determine the effects on each area and the overall status of the S&S program. If there are no weaknesses, the analysis is a simple matter. If there are areas needing improvement, the weaknesses are analyzed both individually and in concert with other weaknesses and then balanced against any strengths and mitigating factors to determine their overall impact on the ability to meet protection requirements. If a vulnerability or gap in policy is identified, see Section 8.2, Interfaces, for reporting requirements.

Factors that should be considered during analysis include:

- Is the weakness isolated or systemic?
- Were Federal and contractor management aware of the weakness, and if so, what action(s) were taken?
- How important or significant is the requirement affected by the weakness?
- Are there mitigating factors, such as the effectiveness of other elements, which compensate for the weakness?
- Does the significance of the weakness result in an actual or potential vulnerability of DOE security interests and or impede the ability to conduct the mission?

EA-22 documents appraisal results that clearly identify findings and opportunities for improvement. When applicable, EA-22 documents strengths as either positive program attributes or best practices, and weaknesses that do not impact risk and performance (e.g., failure to meet a compliance requirement) as deficiencies.

Weaknesses

A weakness is an inadequacy (e.g., failure to implement a requirement or meet a performance standard) identified during an appraisal and may serve as the basis for one or more findings or deficiencies. When weaknesses are identified, they are considered individually and collectively and evaluated in the context of identified strengths or mitigating factors to determine their overall impact on the program's effectiveness. Once a weakness has been identified, the team determines its significance and how it will be documented in the report using the significance determination process (see Figure 1, Significance Determination Process, below).



Figure 1. Significance Determination Process

Appraisal weaknesses are the primary means of identifying elements of the system that do not comply with DOE orders and have already been validated on the spot and daily as part of data collection. Weaknesses, findings, and deficiencies are always worded to express the specific nature of the weakness, clearly indicate whether the weakness is localized or indicative of a trend, and identify the organization responsible for the weakness. Additionally, multiple concerns in the same program element are reviewed to determine whether the potential weaknesses can be rolled up and reported as a single finding or deficiency. This rollup may be appropriate if the single weakness statement can clearly and completely convey the problems. Concerns that are non-systemic, compliance-based weaknesses, or non-systemic performance-based weaknesses that do not result in a significant risk to SNM or high consequence information (e.g., Restricted Data, sensitive compartmented information, special access programs) are documented as deficiencies. After discussions with topical area team leads and site field office management, EA management may determine there is rationale for a finding to be designated as an emerging concern and communicated to site field office management via an issue form. Issue forms may be developed to:

- Document and communicate particularly complex issues to the evaluated site.
- Document weaknesses requiring time-critical mitigation and/or compensatory actions.
- Solicit a written response from line management to help the appraisal team understand the site's perspective.
- Improve communications among the appraisal team and Federal and contractor management regarding, for example, a particularly contentious issue.

The information conveyed by this issue form is preliminary data that is not meant to communicate the entire picture of performance for a program or at a site.

The independent oversight program is designed to enhance DOE safety and security programs by providing the Secretary and Deputy Secretary of Energy, Under Secretaries of Energy, other DOE managers, senior contractor managers, Congress, and other stakeholders with an independent evaluation of the adequacy of DOE policy and requirements, and the effectiveness of DOE and contractor line management performance and risk management in

February 2019

safety and security and other critical functions as directed by the Secretary. Therefore, appraisals sometimes uncover deficiencies or issues that result from necessary policy clarifications (e.g., lack of policy, unclear policy, ambiguous or contradictory policies, inappropriate policy, or inappropriate implementation guidance). In such cases, the cognizant EA office director or appraisal team lead first contacts the Headquarters element responsible for the policy or subject area to ensure that the team has a correct understanding of the applicable policy or its effect on the observed condition. This communication may necessitate a request for a written policy clarification. If the observed policy weakness is not a matter of interpretation, EA communicates the issue to the appropriate Headquarters element, typically via a memorandum that identifies the subject, provides necessary background information, states the problem, discusses its implications, and, if appropriate, recommends a course of action.

Opportunities for Improvement

EA assessors have a broad range of knowledge and have the advantage of observing methods of program implementation across the entire DOE and NNSA complex. When weaknesses in program implementation are identified during appraisals, including concerns that fall short of a finding or deficiency, it is useful for assessors to provide insight on approaches that could be adopted by line management to improve program performance. Opportunities for improvement do not simply restate a finding or suggest a common-sense approach that the site may have missed. Instead, opportunities for improvement are intended to provide actionable suggestions that are provided only in the context of items for consideration by line management, not as directed action.

Strengths

Two types of strengths may be identified during the appraisal process: best practices and positive program attributes. Best practices are methods, techniques, or processes that EA considers to have merit for enhancing performance or assisting in more efficient or effective operations. Best practices are typically beneficial methods or processes that other DOE sites and facilities can readily adapt for use or innovative approaches for addressing a condition that poses a challenge for multiple sites or organizations. Positive program attributes are the elements of a program that may not rise to the level of a best practice, but that EA considers to be a proactive or above baseline method for implementing DOE policy.

Ratings

The conclusions reached through analysis of appraisal results may lead to the assignment of ratings. If requested, the appraisal team is responsible for recommending ratings; however, final approval of ratings rests with the EA Director, with input from the Team Chief and EA-22 Director. Although findings often identify conditions that adversely impact a program, they do not necessarily impact the rating. EA uses three categories of ratings: Effective Performance (Green), Needs Improvement (Yellow), and Significant Weakness (Red) (see EA *Independent Oversight Program Appraisal Process Protocols* for additional details).

Responsibilities for Analysis of Results

Team Chief

• When applicable, coordinates with topical area team leads on the development of an issue form (see Attachment 14. Issue Form).

Topical Area Team Leads/Assessors

- Analyze data to derive preliminary conclusions.
- Use the significance determination process to categorize weaknesses.
- Review strengths for application as a best practice (see Attachment 15. Best Practice Criteria).

February 2019

6.2 Draft Report

Report writing is the phase where the data is thoroughly analyzed, conclusions are developed, and, based on the analysis and conclusions, a report is prepared that accurately reflects the status of the program, program element, facility, or activity that was examined. Appraisal reports consist of an executive summary with an introduction, results summary and conclusion, and best practices and recommendations. The introduction section of the report describes the purpose of the appraisal, the timeframe during which field activities were performed, and how the appraisal data was collected (e.g., interviews, performance tests, document reviews). The results summary section identifies specific appraisal activities in each topical and subtopical area. The areas in which significant concerns, as well as strengths and weaknesses or opportunities for improvement, were identified are described in detail to provide DOE Headquarters, field office management, and contractor personnel with a clear picture of what was reviewed and any pertinent concerns.

The results and conclusion section of the report succinctly describes the results of the data analysis, especially as the analysis relates to the effectiveness of program performance. All conclusions described in this section are supported by text within the results summary and appendices of the report. Best practices and recommendations are typically broader in scope than opportunities for improvement and aim to improve management systems rather than identified weaknesses. A bottom line summary is also developed that is of special importance because it communicates the overall results of the appraisal to the Secretary, other senior DOE leaders, and other interested external stakeholders, such as Congress. To facilitate communication of the results, the bottom line summary typically contains only unclassified or Controlled Unclassified Information.

Appraisal reports also have several accompanying appendices. The first two appendices provide supplemental information, such as assessors' names and dates of the appraisal, and a table of the findings and deficiencies identified in each of the topical area appendices. The remaining appendices are individual reports for each topical area assessed. These appendices contain a brief templated introduction, results, conclusions, and opportunities for improvement. The results section begins with a status of previous EA findings and includes the following for each subtopical area evaluated:

- A general description of the program or concept of operations
- Discussion of program documents
- Discussion of program implementation status and adequacy
- Description of conditions since the previous EA report (or other internal or external appraisal reports)
- Positive program aspects and best practices observed
- Observations warranting further attention and resolution (deficiencies and findings)
- Other subjects as directed by the topical area team lead.

The conclusion section summarizes the results for the topical area and is consistent with the observed performance. Careful effort is necessary for clear communication of all relevant results and the status of program effectiveness in support of the conclusion. The final section of an appendix is opportunities for improvement, which provides potential approaches that could improve program performance.

Responsibilities for Draft Report

Team Chief/Deputy Team Chief

- Conducts focused integration meeting with writers.
- Ensures that the bottom line summary, executive summary, and accompanying appendices are developed and reflect appraisal results.

Topical Area Team Leads/Primary Writers

- Coordinate the preparation of topical area input.
- Ensure that team members follow the report template and guidance for writing a report (see Attachment 16. Appraisal Report Template).
- Ensure completion of the applicable appendix of the report and that it is submitted to EA-22 administrative support for review by both the MRB and QRB.

6.3 Reviews

The EA process ensures that all report elements are reviewed before providing the draft report to site personnel at the closeout briefing. Topical area team reviews of each appendix are the first step in this phase of developing the report. After topical area teams have generated the respective draft appendices, they are reviewed by an MRB consisting of the Team Chief, Deputy, and other personnel, as desired. This review ensures that all topical area team appendices are consistent, and that each appendix is logical and contains adequate information to support the conclusions. The MRB also reviews the bottom line summary and executive summary to ensure that the documents are consistent with the results from each topical area appendix and reflect the primary weaknesses and positive program attributes at the site. The team lead and certain team members may conduct a topical area summary validation with Federal and contractor primary POCs after the MRB. These informal discussions inform POCs of strengths and weaknesses and help identify and resolve potential site concerns prior to the QRB and onsite factual accuracy review process. The meeting begins with an explanation that, at this point in the report writing process, everything is subject to change.

The report and appendices are then reviewed by the QRB, which is composed of senior EA and other managers as designated. Depending on the nature of the QRB's comments, appendices may undergo a second review to ensure that the report meets EA's high-quality standards. The draft report, Executive Summary, is typically transmitted to the Director, Office of Enterprise Assessments, for review and approval. As part of the informal validation process, after the QRB, EA submits each report appendix to the Federal field office manager, or designee, for a factual accuracy review. The field office manager, and/or designees, conducts the review and provides written comments to EA within the agreed upon timeframe (typically four hours). Each comment generated from the factual accuracy review is addressed but may not result in changes to the draft report. The resolution of each comment is then reviewed with the field office and contractor management before the closeout meeting. EA-22's objective for the factual accuracy review and comment period is ensuring that the report is factually correct and presents an accurate evaluation of the effectiveness of the facility's protection program.

Responsibilities for Reviews

MRB Chief/Deputy Team Chief

- Ensures that the bottom line summary and report (executive summary and appendices) are prepared according to the approved format and are consistent with appraisal results.
- Participates on the MRB and provides quality review and recommended improvements.
- Coordinates QRB.

Topical Area Team Leads/Assessors

- Conduct team quality assurance review and edits.
- Update appendices based on the MRB, QRB, and factual accuracy reviews.

February 2019

6.4 Documentation

In addition to development of the draft report, executive summary, and bottom line summary, there are several other documents and activities that support the appraisal process. Prior to departing the site, each topical area team is responsible for creating a list of acronyms, documents reviewed, and personnel interviewed. The acronym lists are combined and become part of the overall final report. Lists of the documents reviewed and personnel interviewed are maintained on the classified Iron Keys and provide a historical perspective of what was included in the scope of the appraisal and contributed to the results in the report. Years after completing an appraisal, EA may be asked to provide specific details about that appraisal or may be questioned on what was or was not identified during an appraisal. These documents provide context and additional information to what was documented in the report. Additionally, the list of the documents reviewed is periodically compared with the data call request to ensure consistency in requested and reviewed documents.

Topical Area Team Leads/Assessors

- Create a list of acronyms used in the topical area appendix and save to classified Iron Key.
- Develop lists of documents reviewed and personnel interviewed during the appraisal and save to classified Iron Key.
- Periodically update data call requests as necessary if documents are not reviewed.

6.5 Closeout Briefing

A closeout briefing with Federal and contractor managers is held on the last day of the appraisal and includes a presentation on observations and preliminary results for each topical area. The Team Chief typically conducts the briefing using slides prepared by each topical area team. Every effort is made to maintain the slides as Controlled Unclassified Information. Topical area team leads and team members do not attend the closeout briefing unless requested. EA-22 formally provides a copy of the draft report to the responsible DOE and NNSA field office manager after the closeout briefing.

Responsibilities for Closeout Briefing

Team Chief

• Conducts the closeout briefing with field office and contractor management.

Deputy Team Chief

- Reviews the briefing slides to ensure that the information is consistent with the draft report and supporting notes are logical and straightforward.
- Delivers draft report to site.

Topical Area Team Leads

• Create the respective briefing slide(s) and supporting notes.

6.6 Small Scope Appraisals

The report writing phase of small scope appraisals is similar to large scope MTAs but differs in the following ways:

• <u>Draft report</u> - Draft reports are developed but may or may not be completed while on site. Also, although these reports contain many of the same elements as the large scope MTAs, because they are typically shorter February 2019

and may not include all topical areas, the template is different. The team lead coordinates with EA-22 management on the appropriate report writing location and template.

- <u>Reviews</u> The review of these reports does not change from the large scope MTAs, with the exception of the MRB and QRB. These reviews are typically conducted electronically or at the EA-22 offices in Germantown, MD.
- <u>Documentation</u> No other documents and activities support the appraisal process for small scale appraisals except for the development of the draft report, executive summary, and bottom line summary.
- <u>Closeout briefing</u> A closeout briefing with Federal and contractor managers is held on the last day of the appraisal and includes a presentation on observations and preliminary results for each topical area. The Team Chief typically conducts the briefing using slides prepared by each topical area team. Every effort is made to maintain the slides as Controlled Unclassified Information. Topical area team leads and team members do not attend the closeout briefing unless directed. EA-22 formally provides a copy of the draft report to the responsible DOE and NNSA field office manager after the closeout briefing.

Responsibilities for Small Scope Appraisals

Team Chief/Deputy Team Chief/Team Lead/Assessor

- Performs all applicable responsibilities identified in Sections 6.1 6.5.
- Ensures that the report follows the template and guidance for writing a report per the *Office of Security Assessments Guiding Principles for Writing Security Appraisal Reports*, dated February 2017 (see Attachment 17. Small Scope Appraisal Report Template).

Section 7: Post-Appraisal Activities

At the completion of onsite data collection activities, a few actions remain before an appraisal is complete. These actions include formal validation with the site and DOE and NNSA program office personnel, issuance of the formal report, briefings of senior DOE officials, and sharing of lessons learned.

7.1 Formal Validation

In addition to the draft report left with the site during the closeout briefing, EA-22 formally provides another copy of the draft report to the DOE and NNSA program office after the appraisal team returns to Germantown, Maryland. Formal validation is 10 calendar days (beginning on the day of the onsite closeout briefing) allotted for the site and program office to complete its post-appraisal review, which includes developing site and program office factual accuracy comments. EA-22 requests the program office to consolidate all comments prior to submission to EA-22. Each comment is reviewed, and a response is provided as to whether the comment was accepted, partially accepted, or the rationale is included on why the report remained unchanged. The resolution of all comments is reviewed with the program office. Discrepancies that cannot be resolved are elevated for resolution through organizational management levels up to and including the Deputy Secretary. For MTAs, the cognizant Program Secretarial Officer has an opportunity to submit a written management response to the draft report's conclusions and any recommendations. If a Secretarial Officer response is provided, this information is included in an appendix to the issued report. The bottom line summary and executive summary are reviewed to ensure that any changes to topical area appendices are incorporated as applicable. The final draft report undergoes a technical edit before being published.

Responsibilities for 10-Day Comment Period

Team Chief

- Elevates discrepancies that cannot be resolved through EA management levels.
- If the cognizant Program Secretarial Office submits a written management response to a draft report's conclusions or recommendations, ensures it is incorporated as an appendix to the report.
- Reviews the resolution of all comments with the program office.

Deputy Team Chief

- Reviews bottom line summary and executive summary to ensure that changes to topical area appendices are incorporated as necessary.
- Ensures that the final draft report is submitted for technical edit.

Topical Area Team Leads

• Coordinate and communicate with the Team Chief and Deputy Team Chief to resolve comments from formal validation phase.

7.2 Final Report

Within 60 days after the closeout meeting, the draft report and bottom line summary are submitted to the EA Director for final review before the report is released to the Office of the Secretary for approval. The approval process includes briefing the applicable program office and Secretary's staff using the bottom line summary. Once approved, final reports are published, distributed, and uploaded into the S&S Information Management System.

Responsibilities for Final Report

Team Chief

- Submits the final draft and bottom line summary to the EA Director within 60 days from the closeout meeting.
- Supports the briefing to the Office of the Secretary as requested.

Deputy Team Chief

• Ensures that final reports are published, distributed, and uploaded into the S&S Information Management System.

7.3 Briefings

A post-brief meeting is held with the Director, EA to provide a summary of the team composition, the appraisal scope and activities conducted, the positive attributes and areas requiring management attention, and an overall conclusion of the results of the appraisal. Briefings may also be conducted for DOE and NNSA managers before or after the final report is approved. External briefings to relevant stakeholders (such as Congressional staff and the Defense Nuclear Facilities Safety Board) are conducted, if appropriate, only after issuance of the final report and completion of all internal DOE briefings. The Team Chief may ask the Deputy Team Chief and topical area team leads to support these briefings as necessary.

Responsibilities for Briefings

Team Chief

- Conducts briefings with senior DOE and NNSA managers as necessary.
- Prepares post-briefing slide and schedules meeting with EA-1 (see Attachment 18. EA-1 Post-briefing Slide Template).

Deputy Team Chief/Topical Area Team Leads

• Support the conduct of briefings as requested.

7.4 Tracking and Trending

EA-22 conducts periodic teleconferences with program office, Federal, and contractor field security officials to share tracking and trending results from recent appraisals. These results are also routinely briefed at meetings of senior Federal and contractor security directors and during various DOE working group meetings. On a more continuous basis, results and lessons learned from appraisal activities are shared with the NTC and the DOE Office of Security Policy.

Responsibilities for Tracking and Trending

Deputy Chief

• Distributes post-appraisal NTC lessons learned report to team.

Topical Area Team Leads

- Assist in the coordination of quarterly teleconferences.
- Support the conduct of quarterly teleconferences and brief topical area information as required.
- Share results with the NTC and the DOE Office of Security Policy.

ATTACHMENT 1 – DATA CALL: PRE-SCOPING MEETING

Please send the following documents to the Department of Energy (DOE) Headquarters (HQ), Germantown Maryland by **[DATE]**. The items may be mailed to the following address: United States DOE, Attn: **[NAME]**, EA-22, 19901 Germantown Road, Germantown D 20874-1201. Electronic files are a preferred alternative to paper documents. It is requested that classified documents be emailed to **[NAME and EMAIL]**. Questions regarding the data call should be addressed to **[NAME]** at **[NUMBER]** or through email at **[EMAIL Address]**.

Management Pre-Scoping Meeting

List of documents requested to support the scoping effort such as:

- Organization chart for Federal Field Office and contractors supporting the S&S program.
- Current approved Federal, contractor, and any other possessing entity Facility Security Plan(s) or Site Security Plan(s).
- Performance Assurance Program plan and list of essential elements.
- Current approved MC&A plan to include a list of material balance areas.
- Asset characterization by protection level and location.

ATTACHMENT 2 – PROJECT PLAN EXAMPLE

1		e Assessments Multi-			40.4mm
	Assessment Team Chief:	NAME		Project Start Date In-brief/ apprasial Start Date	16-Apr 9-Jul
	Assessment Deputy Team Chief:	NAME		Out-brief Date	19-Jul
rePoi	n Information Type	Provided by	Due Date	Timeline	Complete: Y or
1	Schedule Briefing with Administrators/Program Office	Plannin EA22 DIR/Dep DIR	g 11-Mar	(120 days prior to apprasial start date)	
	Schedule Briefing with Site Manager	EA22 DIR/Dep DIR	11-Mar	(120 days prior to apprasial start date)	
	Develop Site Ann Memo and submit to HQ Admin	Team Chief	11-Mar	(120 days prior to apprasial start date)	
	Transmit Site Announcement Memo via email	HQ Admin	10-Apr	(90 days prior to apprasial start date)	
	Distribute Scoping Briefing to Team	Team Chief	20-Apr	(80 days prior to appraisal start date)	
<u> </u>	Develop Data Call	Team Chief	30-Apr	(70 days prior to apprasial start date)	
	Develop Assessment Plan and submit to HQ Admin Resource List (via e-mail)*/***	Team Chief Team Chief	10-May 10-May	(60 days prior to apprasial start date)	
	Clearance Transfer/Training Needs with Site	Team Chief	10-May	(60 days prior to apprasial start date) (60 days prior to apprasial start date)	
	ID CAT/ESS Support Needs	Team Chief	10-May	(60 days prior to appracial start date)	
	Computer Support (via e-mail to John Wells)	Team Chief	10-May	(60 days prior to apprasial start date)	
	Data Call (via e-mail)***	Team Chief	15-Feb	(60 days prior to apprasial start date)	
	Augmentees/Invitational Attendees (Admin prepares)	Team Chief	10-May	(60 days prior to apprasial start date)	
	Logistical Support via e-mail to the Site***	Field Admin	9-Jun	(30 days prior to onsite start date)	
	Email In brief slides to Site (cc: HQ Admin)	Team Chief	9-Jun	(30 days prior to apprasial start date)	
	Overtime Projections (after Resource List is distributed)	HQ Admin Field Admin	9-Jun	(30 days prior to apprasial start date)	
-	Team Announcement e-mail w/attachments*** On-site Site Management Meeting	Team Chief/Deputy	9-Jun 17-May	(30 days prior to apprasial start date)	
	Transmit Assessment Plan to via email	HQ Admin	9-Jun	(30 days prior to apprasial start date)	1
L	Conduct EA-1 Assessment Pre-brief	TeamChief/Deputy	9-Jun	(30 days prior to apprasial start date)	
	Point of Contact List to Site and EA Leads	Team Chief	9-Jun	(30 days prior to apprasial start date)	
	Develop Onsite Apprasial Schedule	Team Chief/Deputy	25-Jun	(14 days prior to apprasial start date)	
	Identify Classified that will be shipped to the site	Team Chief	2-Jul	(7 days prior to apprasial start date)	
		Conduc			
<u> </u>	Logistics Support equipment set-up	Field Support	5-Jul	(4 days prior to onsite start date)	
<u> </u>	Team Travels To Site	All Team Chief	8-Jul	(1 day prior to onsite start date)	
-	Conduct on-site In-brief Execute on-site Data Collection.****	Team Chief All	8-May 9-Jul	(Onsite start Date)	
	Team Travels to home stations	All	13-Jul	(Completion of first week of Data Collecti	on)
	Team Travel to Site	All	4-Jun	(completion of mist week of Data collection	
	Onsite Data Collection and Analysis	All	5-Jun		
	Analysis and Report Writing	All	9-Jun		
	Management Review Board	Team Chief	15-Jul	(4 days prior to out brief)	
	Resolve MRB Comments	Team Leads	16-Jul	(3 days before out brief)	
	Quality Review Board	Team Chief	17-Jul	(2 days before out brief)	
	Resolve Site QRB Comments	Team Leads	17-Jul	(2 days before out brief)	
	Conduct team lesson Learned Meeting Site Factual Accuracy (4 hours) Review	Team Chief Field Admin	17-Jul 18-Jul	(2 days before out brief) (1 days before out brief)	
	Resolve Site factual Accuracy (4 hours) Review	Team Leads	18-Jul	(1 day prior to out brief)	
	Closeout Slides (cc: EA-22 HQ Admin)	Team Chief	18-Jul	(1 day prior to out brief)	
)	Finalize front end of report	Field Admin	19-Jul	(day of out brief)	
	Analysts and Assessors travel to home stations	Team Leads	19-Jul		
2	Conduct Out Brief	Team Chief	19-Jul		
3	Develop "Bottom Line" (cc: HQ Admin)	Team Lead	19-Jul	(day of out brief)	
1 5	Final Draft Report - left at site (one copy) Mgmt. Team Travel to home station	Team Chief/Deputy Mgt. Team	19-Jul 20-Jul	Turnover to site office at out brief	
	Logistics Support packs/sends equipment	Field Admin	20-Jul		
		Reportin			
	Conduct EA-1 Assessment Back-brief	HQ Admin		10 WDs after out brief	
	Final Draft Report uploaded to CLAN	HQ Admin / EACOM	21-Jul	Classified returned to HQ	
	Final Draft Report mailed to B. Nelson	HQ Admin / EACOM	29-Jul	10 WDs after out brief	
I	Program Office Factual Accuracy Review (FAR)	Program Office	29-Jul	10 WDs after receipt of sites FAR	
-	Resolve FAR Comments (send to HQ Admin) Transmit Draft Report to Technical Editors	Team Chief HQ Admin	1-Aug 3-Aug	(13 days after out brief) (15 days after out brief)	
1	Draft Report Transmittal Memo	Team Chief	3-Aug 18-Aug	(30 days after out brief)	
	Resolve Technical Edit Comments (send to HQ Admin)	Team Chief	18-Aug	(30 days after out brief)	
1	Route document for approval	HQ Admin	21-Aug	(33 days after out brief)	
	Conduct Final Derivative Classifier Review	EA 22 Director	31-Aug	(43 days after out brief)	
	Format and Finalize Report	HQ Admin	7-Sep	(50 days after out brief)	
	Final Report & Transmittal Memo/Distribution List	Team Chief/Deputy	12-Sep	(55 days after out brief)	
	Final Report dispatched	EA22 Admin / EACOM	17-Sep	(60 days after out brief)	
		Closeou	It	-	
	Email Bottom Line Summary to: EA-50, D. Donovan, B.	HO Admin			
	Nelson, K. Nowak Update EAShare Master Documents	HQ Admin HQ Admin	1	+	
-	Distribute the tech edit version of final on field CLAN	Field Admin		- I	
1	Distribute post-appraisal NTC LL report to team	Team Chief			
	Add Issues/Finding to Tracking and Trending DB	John Fitzgibbons			
	Add Report title to EA Website	HQ Admin			
	Add Report to SSIMS	HQ Admin			
	Site's Interim Corrective Action Plan (CAP)			CDs after final report	
	EA-22's Response Comments on the Interim CAP	Deputy/Lead		after receipt of Site's CAP	
-	Site's Final Corrective Action Plan (CAP)	Doputy/Lood		CDs after final report	
<u> </u>	EA-22's Response to Final CAP	Deputy/Lead	10 CDs a	after receipt of Site's CAP	
tes:	<u> </u>	I			
	All days are calendar days unless otherwise noted				
1	Issue Forms are usually classified and on file in the ODC				
Ĺ	Conduct focused integration with just writers during begin	ning of week 2- Team Chief			
	Daily Team Reports are handled by the Team Lead / Tea	m Chief			
	Out brief Slides, "Bottom Line", and Executive Summary a			ssional Staff - copies must be provided to E	A-22 Admin
	Delegation of Authority Memo is also prepared by HQ Adr	nin prior to Director's Depar	ture		
	**confirm w/ODC this requirement has been shipped to th				

ATTACHMENT 3 – SCOPING PACKET EXAMPLE



Agenda

The scoping visit provides all parties with an opportunity to communicate in person and review, at the strategic level, the various facets of the pending appraisal. Additionally, the meeting serves as an opportunity for field line managers to identify their areas of interests. The Office of Enterprise Assessments (EA) will also include areas of interest from U.S. Department of Energy (DOE) Headquarters leadership. The collective line management areas of interest will be included in the scope of the appraisal and in the subsequent report. The key topics for today's discussion include:

- Mission and code of conduct
- Schedule, scope (i.e., applicable programs/topics), and process
- Overview of previous EA-22 appraisal results
- Line management areas of interest
- Announcement memorandum and appraisal plan.

Appraisal Packet

The appraisal packet provides a list of EA-22's recent appraisal activities at [Site]. The schedule of activities and summary of specific appraisals are summarized for information purposes.

Month Year Site Multi-Topic Assessment Schedule (Attachment 1)

List and summary of recent EA appraisal activities (Attachment 2)

ATTACHMENT 4 - [SITE] POINT OF CONTACT LISTING TEMPLATE EA-22 [SITE] PRIMARY S&S TOPICAL SUB-TOPICAL PHONE PHONE [SITE] **PRIMARY POC CONTRACTOR POC** E-MAIL E-MAIL AREA **PRIMARY FEDERAL POC PROGRAM PLANNING** Phone AND MANAGEMENT Name E-mail **TOPIC TEAM LEADER:** PROGRAM MANAGEMENT Name AND ADMINISTRATION: Phone Phone Phone Name Name Management E-mail E-mail E-mail Responsibilities PROGRAM MANAGEMENT Name Phone Phone AND ADMINISTRATION: Name Phone Name E-mail E-mail **Delegations of Authority** E-mail PROTECTIVE FORCE Phone Name TEAM LEADER: E-mail PROGRAM Name MANAGEMENT: Phone Phone Phone Name Name E-mail (Organization/Plans/ E-mail E-mail Procedures) Name Phone EQUIPMENT AND Phone Name Phone Name FACILITIES E-mail E-mail E-mail PHYSICAL PROTECTION Phone Name SYSTEMS TEAM LEADER: E-mail Name Phone Phone Phone **PROGRAM MANAGEMENT** Name Name E-mail E-mail E-mail Name Phone Phone **PROTECTION PLANNING** Name Phone Name E-mail E-mail

E-mail

1

ATTACHMENT 5 – EA-1 PRE-BRIEFING SLIDE TEMPLATE

<		ASSESSMENT TYPE]
	<u>Team</u> • [Enter Name]– [Enter title]	<u>Tests/Activities</u> • [Enter Name]– [Enter title]
8	<u>Date</u> Onsite Data Collection/Report Writing: [Enter Date] Onsite Out Brief: [Enter Date] 	<u>Federal Coordination</u> • [Enter names and organizational code]

[ENTER CLASSIFICATION LEVEL]

ATTACHMENT 6 – DATA CALL: INTEGRATED PLANNING

The following documents are requested for review by **[DATE]**. The items may be mailed to the following address: U.S. Department of Energy (DOE), Attn: **[NAME]**, EA-22, 19901 Germantown Road, Germantown D 20874-1201. Electronic files are a preferred alternative to paper documents. Organize data call information using the same headings and number/letter descriptions that are included in this data call request. Classified documents should be emailed to **[NAME and EMAIL]**. If a document is not available, indicate a contact name and telephone number of the individual who can provide information related to that topical area.

Questions regarding the data call should be addressed to [NAME] at [NUMBER] or through email at [EMAIL Address]

Integrated (For All Topics)

- 1. Organizational charts with names for all Federal and contractor site elements (including significant S&S subcontractors) that have S&S responsibilities.
- 2. A site (11"x17" or larger) plan drawing indicating security areas and target location(s) associated with the site/facility. Include maintenance and communications facilities and the locations of the central and secondary alarm stations. Include a separate (11"x17" or larger) drawing for the PA and PIDAS zones.
- 3. Delegation memorandums (i.e., Officially Designated Federal Security Authority).
- 4. List of applicable DOE directives for each contract with S&S responsibilities (i.e., M&O, any S&S services support contracts, etc.).
- 5. Implementation plans and status of any S&S-related DOE directives not fully implemented.
- 6. Approved and pending deviations and associated risk analysis.
- 7. List of all possessing Federal and contractor organizations with a facility clearance that support site operations.
- 8. List of all applicable possessing Federal and contractor organizations with a facility clearance that support operations.
- 9. Documentation implementing the tactical doctrine to include defensive and barrier plans.
- 10. Federal survey program procedure and previous/current year schedules.
- 11. Contractor self-assessment procedures and previous/current year schedules.
- 12. Previous year Federal survey report for each S&S contractor.
- 13. Most recent Federal self-assessment reports and contractor self-assessment reports.
- 14. Federal and contractor procedures for Issues Management.
- 15. List of Federal and contractor internal and external open findings.
- 16. Federal and contractor corrective action plans for the previous Office of Enterprise Assessments (EA) appraisals.
- 17. Records (other than S&S Information Management System) that reflect Federal verification, validation, and closure of internal and external issues, findings, concerns, and/or observations for the previous 12 months.
- 18. Most current essential element test plans.
- 19. Approved compensatory measures for essential elements.
- 20. All local policies and procedures regarding access control to vaults and vault-type rooms that contain classified matter.
- 21. Site map showing the locations of all vaults and vault-type rooms in which classified matter is stored.
- 22. List of areas with non-conforming storage.

Request access to the following items during onsite visits.

- 23. PAP test reports for the prior/current year in all topical areas.
- 24. Corrective action plans for all internal and external findings.

February 2019

ATTACHMENT 7 – TEST DESCRIPTION DOCUMENT TEMPLATE

The Office of Security Assessments (EA-22) Performance Test Description Document

[Site Name] [Date]

Appraisal scope and process:

EA lines of inquiry have been provided to [site] management in the EA-22 [site] appraisal plan. EA uses a variety of performance testing and other data collection methods to assess the readiness of the protection system against a broad spectrum of threats and adversary capabilities. This test description document provides details on the objectives, tasks, conditions, and standards for performance testing planned during this appraisal. The [Title/Name] has been assigned as the EA point of contact for this performance testing and is responsible for deconflicting planned testing to ensure efficient use of time and resources.

Data collection:

Accurate data collection is a central feature of the appraisal process. Methodologies for collecting data, as part of this appraisal, include document reviews, facility tours, interviews, observations, limited-scope performance tests (LSPTs), and alarm response and appraisal performance tests (ARAPTs). Interviews with operations, training, and performance test managers, records and certification reviews, etc., are coordinated and conducted as indicated on the integrated appraisal schedule coordinated separately with the site. Evaluation criteria established for data collection and performance tests is consistent with Departmental requirements, approved procedures, site training, and/or U.S. Department of Energy (DOE) National Training Center (NTC) standards. EA evaluation criteria is provided to and discussed with site personnel prior to all data collection or performance testing activities.

Appraisal tests and schedule:

To maintain test integrity where necessary (i.e., limited-notice), the integrated appraisal schedule includes the corresponding numbers of the performance test items identified below. EA requests [Site] review and provide input to ensure that the test items and schedule incorporates planning considerations previously discussed with site personnel.

Below is a list of performance testing activities that EA would like to observe during the [Year] [Site] appraisal:

When filled in mark as TRUSTED AGENT INFORMATION DO NOT DISSEMINATE

List of planned testing:

- 1. Detection, response, and resolution of an attempted theft of Special Nuclear Material (SNM) from a Material Access Area (MAA).
- 2. Detect, respond and resolve the attempted theft of accountable classified matter in open storage in a vault-type room (VTR).
- 3. Test 3
- 4. Test 4
- 5. etc.
- 6. etc.

Description, Task, Condition, Standard, and Data Call for each planned test:

1. Response to the attempted theft of Special Nuclear Material (SNM) from a MAA.

<u>Description:</u> The objective of this test is to evaluate the [SITE] system for detection, response, and resolution of an attempted theft of SNM from a MAA. Three integrated components to be evaluated included protective force detection of the attempted theft and ensuing response actions, response of Central Alarm Station (CAS) personnel, and MC&A actions to account for the SNM in the area.

a. <u>Task:</u> [SITE] will detect and recognize the attempted theft of SNM and execute a response in accordance with site policies and procedures.

b. <u>Condition</u>: Performance testing personnel shall conduct an integrated performance test, per approved performance testing plans and procedures. A role player, carrying a sealed source simulating a criminal act, will attempt to exit from an MAA during routine operations.

c. <u>Standard:</u> Evaluation criteria are DOE order requirements and site procedures for the execution of a task. EA will evaluate:

(1) Effectiveness of the detection of an anomaly, and the appraisal, response, and resolution of the incident.

(2) Execution of response plans and procedures to include:

1) operability and functionality of portal monitors

2) initiation of an alarm from the portal

3) response of protective force and CAS personnel

4) ability of MC&A to identify the SNM item and its assigned location

5) ability of site personnel to conduct and reconcile an inventory of SNM items.

d. Data call:

(1) If not already provided in prior data call, provide site policies and procedures associated to the detection, response, and resolution of the attempted theft of SNM.

When filled in mark as TRUSTED AGENT INFORMATION DO NOT DISSEMINATE

ATTACHMENT 8 – DATA COLLECTION FORM EXAMPLE

Limited-Scope Performance Test

Data Collection Form

Task: Conduct an alarm response and assessment performance test (ARAPT)

Condition: As members of a protective force who have been issued equipment, routine conditions, and an alarm

Standards: Personnel must appropriately respond to an alarm. Effective completion of performance objectives 1-3 (**bolded below**) represents the minimum standard for ARAPT response conduct.

Evaluation Criteria and Related Criteria:

EVALUATION CRITERIA (and other information)	Meets requirement	Does not meet requirement	Notes
 Was the ARAPT conducted with no prior notice to evaluate protective force response to a specific location under alarm protection (e.g., a building, vault/vault-type room, or other area that has a site-specific security interest identified in the SSP)? [DOE Order 473.3A, Attachment 2, Annex 2, Paragraph 1.b.(1)] 			
 Was protective force readiness and response to alarm conditions evaluated? Did tests consider all aspects of response, including communications, personal protective measures, equipment availability and serviceability, and any protective force and facility coordination activities that may be necessary to mitigate a security incident? [DOE Order 473.3A, Attachment 2, Annex 2, Paragraph 1.b.(2)] 			
 Was the ARAPT coordinated with facility representatives and trusted agents to ensure that safety requirements were fulfilled, security was not compromised, and operational disruption was minimized? Were protective force personnel advised of the test, were handguns holstered, and were any auxiliary weapons maintained without a round in the chamber? [DOE Order 473.3A, Attachment 2, Annex 2, Paragraph 1.b.(3)] 			
RELATED CRITERIA (and other information) Reference: DOE NTC TRF-100, Lesson 45: Patrol Techniques and Tactics; Lesson 46: Individual and Team Tactical Movement; Lesson 52: Containment Strategies and Operations; Lesson 58: Denial Strategies and Operations (all last modified 4/05/13)	Meets requirement	Does not meet requirement	Notes
1. Did the protective force respond to the proper location?			
2. Did the central alarm station (CAS)/secondary alarm station (SAS) provide conditions at the alarm point utilizing video assessment?			
3. Was the protective force response timely? Was the protective force response performed in accordance with site timelines?			
4. Did protective force personnel don tactical equipment prior to response?			
5. Did responders use effective individual tactics and team tactics during their approach to the alarm location?			
6. Did responders use terrain to conceal their approach routes?			
7. Did the protective force supervisor provide clear direction?			
8. Were overall communications effective?			
9. Was containment/denial established?			
10. Is there a site-specific procedure for conducting an ARAPT and was it followed?			

Sequence of Activity: The objective is to evaluate protective force readiness and response to alarm conditions. A trusted agent will be in position to generate an alarm at a set location. Upon the trusted agent's discretion, he/she will don a controller vest and generate the alarm. As soon as the CAS broadcasts the alarm, the ARAPT will be announced by a predesignated trusted agent. Other evaluators will be pre-positioned in the vicinity of expected responses and don their vests as soon as the ARAPT is announced. Alternatively, the test can be initiated by way of a cue card to the CAS/SAS operator stating the ARAPT and the alarm location.

Evaluation (explanation of why the requirements were not met/identify trends):

Safety Review/Risk Assessment: Office of Security Assessments evaluators will coordinate with site trusted agents/safety personnel to obtain a site-developed risk assessment. Typical considerations and/or safety controls include an announcement of the ARAPT by the CAS when the alarm point is initially broadcast and informing a shift supervisor of this test immediately prior to its start. Since the shift supervisor is in the officers' chain of command, he or she would be able to confirm to the officers that an ARAPT is being conducted and that officers should follow appropriate operating procedures. The trusted agent will be in communication with the test controller, who will be in communication with protective force operations so that the exercise can be cancelled if necessary.

ATTACHMENT 9 – TRUSTED AGENT NON-DISCLOSURE FORM

OFFICE OF ENTERPRISE ASSESSMENTS MEMORANDUM OF UNDERSTANDING AND AGREEMENT REGARDING TRUSTED AGENT DUTIES AND RESPONSIBILITIES

This memorandum summarizes the purpose, duties, responsibilities, and relationships associated with the use of Trusted Agents in connection with performance testing by the Office of Security Assessments (EA-22), within the U.S. Department of Energy (DOE) Office of Enterprise Assessments (EA).

1.0 <u>Background</u>:

1.1 Performance Tests.

When conducting performance tests in conjunction with EA appraisals, EA-22 typically employs one or more Trusted Agents appointed by the assessed facility/organization who assist in planning and conducting the tests. EA-22 places a great deal of reliance on Trusted Agents who possess an intimate knowledge of configuration, organizations, and procedures to ensure that the necessary detailed planning, coordination, and local resource allocation are achieved on an expedited basis.

1.2 Duty of Confidentiality.

Because the Trusted Agent represents the assessed facility/organization and is knowledgeable of sensitive performance test information (e.g., scenario details), it is critically important that the Trusted Agent and their managers understand the confidentiality requirements of the position. For the purposes of the Trusted Agent's responsibilities, sensitive information includes both oral and in writing. Further, sensitive information includes anything that may be indirectly received by the Trusted Agent (for example, information that is inadvertently heard by the Trusted Agent).

2.0 <u>Responsibilities</u>:

2.1 Representation of Assessed Facility/Organization.

Trusted Agents represent their facilities/organization in agreeing to various details of performance test planning and conduct. Such details may include but are not limited to the identification and the selection of appropriate "insiders" or insider information, the selection of realistic scenarios and scenario events, and the development of appropriate control measures and simulations. The Trusted Agent **will have** sensitive scenario details or other planning details that could compromise testing activities and shall not disclose information to any other individuals who are not Trusted Agents including higher managers, without written authorization from the EA official.

Rev 3.0, XX XX, 2018

2.2 Collaboration with EA-22.

Trusted Agents work closely with the EA-22 planning team and site personnel to ensure that performance tests are rigorous, realistic, and safe. In this regard, Trusted Agents must willingly provide all information necessary to devise and conduct realistic, meaningful, and safe performance tests. Further, Trusted Agents take the lead in working with other site personnel to ensure that the necessary planning, coordination, and logistical requirements are accomplished and are done so without divulging or compromising sensitive information that might affect the validity of test results.

3.0 Non-Disclosure Agreement:

As an undersigned party to this agreement, the Trusted Agent understands that any and all information regarding knowledge of performance testing is considered sensitive information and must be strictly controlled to maintain test integrity. The Trusted Agent further understands that DOE/NNSA may suffer irreparable harm in the event of any breach of confidentiality, directly or indirectly. DOE will pursue the full range of sanctions available including termination or loss of unescorted access, as well as referral to the DOE Office of the Inspector General or the Department of Justice for potential criminal prosecution.

The obligation of nondisclosure shall continue after the conclusion of the Trusted Agent's responsibilities under this agreement until the information is no longer controlled (for example, completion of the test).

By signing below, the Trusted Agent formally acknowledges full and complete understanding of an agreement to the foregoing terms.

TRUSTED AGENT:				
Print Na	Print Name			
SITE OFFICIAL*:				
Print Na	Print Name			
EA-22 OFFICIAL**:				
Print Na	Print Name			
Type of information	FOF	LSPT (type)		
Level of information	Level of information Full			
Site:				
* designated site TA requesting official				
** designated EA TA approval authority		Rev 3.0, January 2019		

ATTACHMENT 10 – INTEGRATED SCHEDULE TEMPLATE

	Monday Month, day, Year					
Time	Activity	EA POC	Federal POC	Contractor POC	Location	Comments
0930-1130	Classified matter destruction					
10:00-12:00	Contractor self- assessment program					
1300-1500	Protective force training					
1300-1500	Systems maintenance records					
1530-1600	Daily bullets to writer Topic Team Meeting					
	PPM Daily Validation					
	IS Daily Validation					
1600	MC&A Daily Validation					
	PF Daily Validation					
	PSS Daily Validation					
1700	Team Meeting	All Team Members	N/A		Workspace	

ATTACHMENT 11 – PLANNING WORKSHEET TEMPLATE

Extractions from DOE Order 142.3A, Change 1, Unclassified Foreign Visits and Assignment dated 1-18-2017

Ref #	Requirement	Citation	Yes	No	Notes
	Federa	al Requirements			
1.	Has the contractor requirements document (CRD) been included in contracts involving foreign national access to DOE sites, information or technologies?	3.b.			
2.	Are all UFV&A entered into the Foreign Access Central Tracking System (FACTS)?	4.a			
3.	Is there sufficient documentation of citizenship/identity/eligibility to be in the United States? Is the lawful immigration status of foreign nationals valid for the duration of the visit or assignment?	4.b			
4.	Do escorts comply with requirements as defined in the site security plan (SSP)?	5.g.			
	Contrac	tor Requirements			
5.	Has the Head of the Hosting Site designated points of contact for UFVA program management and provided contact information to the DOE field element and lead program Secretarial Officer and the Office of Health, Safety and Security?	Att. 1, 4.a.(3)			
6.	Has program-specific guidance been issued and is it being followed?	Att. 1, 4.a.(4)			
7.	Do program officials, hosts, and escorts have sufficient foreign visitor training or job experience, and are their responsibilities properly assigned?	Att. 1, 4.a. (5)			

ATTACHMENT 12 – INTERVIEW FORM TEMPLATE

Interview Data Collection Form

Subtopical Area:	Date/Time:
Interviewer:	Interviewee:
Objective:	Agenda:
	1.
LOIs and Supplemental Questions:	Response:
Relevant Data Call Reviewed in Advance:	Additional Documents to be Reviewed:
Follow-On:	1
Attendees:	Follow-On POCs:

<u>NOTES</u>

ATTACHMENT 13 – MULTI-TOPIC ASSESSMENT TEAM CHECKLIST

	Task	Assigned	Completed
	Planning		
1	Review Team Responsibilities		
2	Coordinate performance testing with EA POC		
3	Develop schedule for week 1		
4	Develop schedule for weeks 2 and 3		
5	Review data call completeness		
6	Complete planning worksheet(s)		
7	Request additional data call, if necessary		
8	Provide Comm. Center Admin documents/media during planning week for transmitting to Site		
	Conduct		
1	Discuss schedule and coordinate with other teams as necessary		
2	Provide daily feedback to support submission of team bullets		
3	Conduct daily validation with site Federal and contractor POCs		
4	Validation of potential findings/discrepancies with site Federal and contractor POCs		
	Reporting		
1	Conduct read-through(s) of draft report		
2	Develop OFIs		
3	Resolve MRB comments		
4	Conduct summary validation of draft report with site		
5	Resolve QRB comments		
6	Respond to factual accuracy comments		
	Closeout Documentation		
1	Develop acronym list and provide to Admin		
2	Develop closeout briefing slides		
3	Save Documents Reviewed list to removable disk drive		
4	Save Personnel Interviewed list to removable disk drive		
	Cleanup Activities		
1	Empty and shred classified binder and team notes, if necessary		
2	Return site documents if promised		
3	Separate data call documents/media for pickup by site		
4	Provide Admin documents/media for transmitting to Headquarters		
5	Clean up workspace		
6	Discuss process improvements to include revision of the data call, and lessons learned for next appraisal		

ATTACHMENT 14 – ISSUE FORM

OFFICE OF ENTERPRISE ASSESSMENTS (EA)

OVERSIGHT PROGRAM

ISSUE FORM

The purpose of this issue form is to convey to cognizant managers potentially significant information from an ongoing Independent Oversight Program appraisal activity and solicit feedback. EA requests additional information pertaining to this issue (including mitigation actions, if appropriate), along with management's comments on factual accuracy. The information conveyed by this issue form is preliminary data that is not meant to communicate the entire picture of performance for a program or at a site. Consequently, this form should be provided only to those who have a need to know the information and used only in the context of ensuring effective communications among cognizant DOE management, the site, and the Office of Enterprise Assessments.

SITE: _____

SUBJECT: _____

Notification of an imminent danger or major vulnerability in accordance with DOE policy? Yes _____ No _____

1. Issue:

2. Impact:

3. Requirement/Standard:

Originating Team/Staff Member	Date
0 0	

Approval:

Team Leader/Office Director _____ Date _____

ATTACHMENT 15 – BEST PRACTICE CRITERIA

Best Practice: A security-related practice, technique, process, or program attribute observed during an appraisal that may merit consideration by other DOE and contractor organizations for implementation because it achieves one or more of the following attributes:

- 1) Has been demonstrated to substantially improve security performance of a DOE operation;
- 2) Represents or contributes to superior performance (beyond compliance);
- 3) Solves a problem or reduces the risk of a condition or practice that affects multiple DOE sites or programs; or
- 4) Provides an innovative approach or method to improve effectiveness or efficiency.

Format: The format below is used during an appraisal to describe the best practice and obtain management review:

- I. Title:
- II. Topical Area:
- III. Site/Facility:
- IV. Description of best practice:
- V. Why is this considered a best practice?
- VI. Benefits of this practice:
- VII. Reference documents:
- VIII. Site point of contact for further information:

ATTACHMENT 16 – APPRAISAL REPORT TEMPLATE					
1.0	Introduction				
	1.1	DOE Secur	ity Expectations		
2.0	Results				
	2.1	Protection of	of SNM		
	2.2		of Classified Matter		
	2.3	Conclusion			
3.0	Best Prac	ctices and Rec	commendations		
	3.1	Best Practic			
	3.2	Recommen	dations		
Appendix A	Supplem	ental Informa	ntion		
Appendix B	List of Fi	ndings and D	eficiencies		
Appendix C	Program	Planning and	l Management		
	C.1.	Results			
	C.1.1		evious EA Findings		
	C.1.2		anagement and Administration		
		C.1.2.1	Management Responsibilities		
		C.1.2.2	Delegations of Authority		
		C.1.2.3	Requirements Implementation		
	C.1.3	S&S Planni	ng		
		C.1.3.1	Security Plans		
		C.1.3.2	Supporting Analytical Basis (Tactical Doctrine)		
		C.1.3.3	Deviations (Exemptions and Equivalencies)		
	~	C.1.3.4	Security Conditions		
	C.1.4.		mance Assurance		
		C.1.4.1	Federal Survey Program		
		C.1.4.2	Contractor Self-Assessment Program		
		C.1.4.3	Issues Management Program		
		C.1.4.4	Incidents of Security Concern (IOSC)		
	015	C.1.4.5	Performance Assurance Program (PAP)		
	C.1.5	÷	ide Support		
		C.1.5.1	Facility Clearance and Registration (FCL) and Foreign		
		0150	Ownership, Control or Influence (FOCI)		
		C.1.5.2	S&S Awareness		
		C.1.5.3	Control of Classified Visits		
	C_{1}	C.1.5.4	Personnel Development and Training		
	C. 1.6	Personnel S C.1.6.1			
			Security Clearances		
C.1.6.2 Unclassified Foreign Visits and Assignments		• •			
		C.1.6.3	Human Reliability Program		
	C.2	C.1.6.4 Conclusion	Insider Threat Program		
	C.2 C.3				
	U.3	Opportuniti	es for Improvement		

Appendix D Physical Protection Systems

- D.1 Results
- D.1.1 Status of Previous EA Findings
- D.1.2 Program Management and Planning
- D.1.3 Security Areas
- D.1.4 Posting Notices
- D.1.5 Locks and Keys Program
- D.1.6 Barriers and Protective Force Posts
- D.1.7 Communications, Electrical Power and Lighting
- D.1.8 Secure Storage and Interior Systems
- D.1.9 Intrusion Detection, Alarm Monitoring, and Assessment Systems D.1.9.1 Exterior Systems
 - D.1.9.2 Alarm Monitoring and Assessment
- D.1.10 Maintenance
- D.1.11 Access Control and Entry/Exit Screening
- D.1.12 DOE Security Badge Credential, and Shield Program
- D.2 Conclusion
- D.3 Opportunities for Improvement

Appendix E Protective Force

- E.1 Results
- E.1.1 Status of Previous EA Findings
- E.1.2 Protective Force Management and Administration
 - E.1.2.1 Protective Force Planning, Operational Guidance, and Written Procedures
 - E.1.2.2 Protective Force Organization
 - E.1.2.3 Operational Assurance
- E.1.3 Protective Force Training and Qualifications
 - E.1.3.1 Training Program Management
 - E.1.3.2 Training Records Management
 - E.1.3.3 Training Exercises
 - E.1.3.4 Qualifications
- E.1.4 Protective Force Facilities and Equipment
- E.1.5 Protective Force Firearms
 - E.1.5.1 Firearms Training
 - E.1.5.2 Firearms Operations
 - E.1.5.3 Firearms Qualifications
- E.1.6 Performance Testing
 - E.1.6.1 Performance Test Exercises
 - E.1.6.2 Force-on-Force Exercises
 - E.1.6.3 Exercise Conduct and Safety
- E.2 Conclusion
- E.3 Opportunities for Improvement

Appendix F Material Control and Accountability

- F.1 Results
- F.1.1 Status of Previous EA Findings
- F.1.2 Program Management
 - F.1.2.1 Program Integration
 - F.1.2.2 MC&A Plan and Documentation
 - F.1.2.3 MC&A Systems Effectiveness Program
 - F.1.2.4 MC&A Training

	F.1.2.5	Termination of Safeguards
F.1.3	Material Con	itrol
	F.1.3.1	Access Controls
	F.1.3.2	Material Surveillance
	F.1.3.3	Material Containment
	F.1.3.4	Material Detection and Assessment
F.1.4	Measurement	t
	F.1.4.1	Measurement Methods and Qualification
	F.1.4.2	Measurement Control Program
F.1.5	Material Acc	ounting
	F.1.5.1	General
	F.1.5.2	NMMSS Reporting
F.1.6	Physical Inve	entory
	F.1.6.1	Inventory Program
	F.1.6.2	Inventory Reconciliation
F 2	Conclusion	

F.2 Conclusion

F.3 Opportunities for Improvement

Appendix G Information Security

- G.1 Results
- G.1.1 Status of Previous EA Findings
- G.1.2 Program Management
- G.1.3 Handling and Protection
 - G.1.3.1 Marking
 - G.1.3.2 Accountability
 - G.1.3.3 Classified Information in Use
 - G.1.3.4 Storage
 - G.1.3.5 Reproduction
 - G.1.3.6 Transmission and Receipt
 - G.1.3.7 Destruction
- G.1.4 Foreign Government Information
- G.1.5 Release or Disclosure of U.S. Classified Information to Foreign Governments
- G.1.6 Operations Security (OPSEC)
- G.1.7 Technical Security Program
 - G.1.7.1 TSCM
 - G.1.7.2 TEMPEST
 - G.1.7.3 COMSEC
 - G.1.7.4 PDS
 - G.1.7.5 WISEC
- G.2 Conclusion
- G.3 Opportunities for Improvement

ATTACHMENT 17 – SMALL SCOPE APPRAISAL REPORT TEMPLATE

Executive Summary

1.0	Introduct	tion	
2.0	Results		
	2.1	Program Planning and Management2.1.1 (Applicable subtopical areas from MTA report template)	
	2.2	Protective Force	
		2.2.1 (Applicable subtopical areas from MTA report template)	
	2.3	Physical Protection Systems	
		2.3.1 (Applicable subtopical areas from MTA report template)	
	2.4	Material Control & Accountability	
		2.4.1 (Applicable subtopical areas from MTA report template)	
	2.5	Information Security	
		2.5.1 (Applicable subtopical areas from MTA report template)	
3.0	Opportunities for Improvement		
Appendix A	Suppleme	ental Information	

Appendix B Findings and Deficiencies

ATTACHMENT 18 – EA-1 POST-BRIEFING SLIDE TEMPLATE



[ENTER CLASSIFICATION LEVEL]

APPENDIX A PROGRAM PLANNING AND MANAGEMENT

APPENDIX B PERSONNEL SECURITY
APPENDIX C PROTECTIVE FORCE

APPENDIX D PHYSICAL PROTECTION SYSTEMS

APPENDIX E MATERIAL CONTROL AND ACCOUNTABILITY

APPENDIX F INFORMATION SECURITY

APPENDIX G TOPICAL AREA REFERENCES

Program Planning and Management

6 Code of Federal Regulations (CFR) Part 27, Chemical Facility Anti-Terrorism Standards

7 CFR Part 331, Possession, Use, and Transfer of Select Agents and Toxins

9 CFR Part 121, Possession, Use, and Transfer of Select Agents and Toxins

10 CFR Part 106, Safeguarding of Restricted Data

10 CFR Part 110, Export and Import of Nuclear Equipment and Material

10 CFR Part 707, Workplace Substance Abuse Programs at DOE Sites

10 CFR Part 709, Counterintelligence Evaluation Program

10 CFR Part 710, Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special Nuclear Material

10 CFR Part 712, Human Reliability Program

10 CFR Part 810, Assistance to Foreign Atomic Energy Activities

10 CFR Part 824, Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations

10 CFR Part 835, Occupational Radiation Protection, Subpart M and Appendix E

10 CFR Part 860, Trespassing on Department of Energy Property

10 CFR Part 1016, Safeguarding of Restricted Data

10 CFR Part 1017, Identification and Protection of Unclassified Controlled Nuclear Information

10 CFR Part 1045, Nuclear Classification and Declassification

15 CFR Parts 730 to 780, Export Administration Regulations

22 CFR Parts 120 to 130, International Traffic in Arms Regulations

31 CFR Parts 500 to 598, Office of Foreign Assets Control, Department of Treasury

32 CFR Part 117.56, Foreign ownership, control or influence.

32 CFR Part 2001, Classified National Security Information

32 CFR Part 2002, Controlled Unclassified Information

32 CFR Part 2004, National Industrial Security Program Directive No. 1

36 CFR Chapter XII, Subchapter B, Records Management

48 CFR Chapter 908, Department of Energy Acquisition Regulation

48 CFR Section 952.204-2, Security Requirements

48 CFR Section 952.204-73c, Facility Clearance

49 CFR Part 40, Procedures for Transportation Workplace Drug and Alcohol Testing Programs

5 U.S.C. Subpart C, Employee Performance, Chapter 41, Training

10 U.S.C. Section 2536, Award of certain contracts to entities controlled by a foreign government: prohibition

18 U.S.C. Section 923 (g)(6), *Licensing*

42 U.S.C. Sections 2011 through 2296, Atomic Energy Act of 1954, as amended

42 U.S.C. Sections 2271-2284, Enforcement of Chapter (Atomic Energy)

42 U.S.C. Section 5801, 5877 and 307, Energy Reorganization Act of 1974

42 U.S.C., Sections 7101 to 7352, Department of Energy Organization Act, as amended.

50 U.S.C. Section 402a, Coordination of Counterintelligence Activities

82 FR 7920, Mandatory Guidelines for Federal Workplace Drug Testing

Executive Order (EO) 12829, National Industrial Security Program, dated 01-26-93

EO 12968, Access to Classified Information, dated 8-4-95

EO 12977, Interagency Security Committee, dated 10-19-95

EO 13526, Classified National Security Information, dated 12-29-09

EO 13549, Classified National Security Information Program for State, Local, Tribal, and Private Sector Entities, dated 8-18-10

EO 13556, Controlled Unclassified Information

EO 13587, Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information, dated October 7, 2011

Homeland Security Presidential Directive 3, Homeland Security Advisory System

Homeland Security Presidential Directive 7, Critical Infrastructure Identification, Prioritization, and Protection

Interagency Security Committee (ISC) Policy, Planning and Response to an Active Shooter, November 2015

ISC Standard, The Risk Management Process for Federal Facilities, November 2016

ISC Standard, Items Prohibited from Federal Facilities, February 2013

ISC Appendix, The Design Basis Threat (Appendix A), dated June 2017

ISC Appendix, Countermeasures (Appendix B), dated May 2017

ISC Appendix, Child-Care Center Level of Protection Template (Appendix C), dated January 2016

National Security Decision Directive 84, Safeguarding National Security Information

Presidential Policy Directive 7, National Terrorism Advisory System, dated 01-26-11

Presidential Policy Directive 21, Critical Infrastructure Security and Resilience, dated 2-12-13

Deputy Secretary Memorandum, Security Incident (Including Cybersecurity) Notification Protocol, dated 8-23-13

Presidential Memorandum, National Insider Threat Policy and Minimum Standards for Executive Branch Insider Threat Programs, dated November 12, 2012

Department of Defense 5220-22-R, Industrial Security Regulation

Department of Defense 5220-22-M, National Industrial Security Program Operating Manual

DOE Policy 112.1, DOE Roles and Responsibilities - National Laboratories, dated 11-23-16

DOE Order 150.1A, Continuity Programs, dated 3-31-14

DOE Order 151.1D, Comprehensive Emergency Management System, dated 8-11-16

DOE Guide 151.1-2, Technical Basis, dated 7-11-07

DOE Guide 151.1-5, Biosafety Facilities Emergency Management Guide, dated 7-11-07

DOE Order 206.1, Department of Energy Privacy Program, dated 1-16-09

DOE Order 221.1B, Reporting Fraud, Waste and Abuse to the Office of Inspector General, dated 4-19-08

DOE Order 226.1B, Implementation of DOE Oversight Policy, dated 4-25-11

NNSA SD 226.1B, NNSA Site Governance, dated 8-12-16

DOE Guide 226.1-2A, Federal Line Management Oversight of DOE Nuclear Facilities, dated 4-14-14

DOE Policy 226.2, Policy for Federal Oversight and Contractor Assurance Systems, dated 8-9-16

DOE Order 227.1A, Independent Oversight Program, dated 12-21-15

DOE Order 243.1B, admin. change 1, Records Management Program, dated 03-11-13

DOE Order 251.1D, Departmental Directives Program, dated 1-17-17

DOE Order 350.1, Change 6, Contractor Human Resources Management Programs, dated 9-30-96

DOE Order 360.1C, Federal Employee Training, dated 7-6-11

NNSA SD 360.1, Federal Employee Training, dated 5-16-14

DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets, dated 9-29-10

DOE Order 414.1D, Chg 1, Quality Assurance, dated 4-25-11

DOE Order 422.1, Chg 2, Conduct of Operations, dated 6-29-10

DOE Order 426.1A, Federal Technical Capability Program, dated 1-17-17

DOE Order 426.2, Chg 1, Personnel Selection, Training, Qualifications, and Certification Requirements for DOE Nuclear Facilities, dated 4-21-10

NNSA SD 430.1C, Real Property Asset Management, dated 1-18-2017

DOE Order 457.1A, Nuclear Counterintelligence Program, dated 8-26-13

DOE Policy 470.1B, Safeguards and Security Program, dated 2-10-16

DOE Order 470.3B, Graded Security Protection (GSP) Policy, dated 8-12-08 (Archived but still applicable)

DOE Order 470.3C, Design Basis Threat (DBT), dated 11-23-16

DOE Order 470.4B, Chg 2, Safeguards and Security Program, dated 7-21-11

NNSA SD 470.4-1, Defense Nuclear Security Federal Oversight Process, dated 4-1-16

NNSA SD 470.4-2, Enterprise Safeguards and Security Planning and Analysis Program, dated 6-23-18

DOE Order 470.5, Insider Threat Program, dated 6-2-14

DOE Order 471.1B, Identification and Protection of Unclassified Controlled Nuclear Information, dated 3/10

DOE Order 471.3, Chg 1, Identifying and Protecting Official Use Only Information, dated 4-9-03

DOE Manual 471.3-1, Chg 1, Manual for Identifying and Protecting Official Use Only Information

DOE Order 472.2, Chg 1, Personnel Security, dated 7-21-11

DOE Order 473.3A, Chg 1, Protection Program Operations, dated 3-23-16

NNSA SD 473.3, Enterprise Mission Essential Task List Protective Force Training Program, dated 9-10-14

DOE Order 475.1, Counterintelligence Program, dated 12-10-04

DOE Order 475.2B, Identifying Classified Information, dated 10-3-14

NNSA BOP-10.003, Site Integrated Assessment Plan Development, Updating, and Reporting, dated 1-18-12

DOE Technical Standard 1150-2013, *Quality Assurance Functional Area Qualification Standard*, dated 12-2-13

DOE Technical Standard 1192-2018, Security Risk Management Technical Standard, dated 5/18

DOE Technical Standard 1210-2012, Incidents of Security Concern

Memorandum from Deputy Secretary of Energy and the Deputy Secretary of Defense, subject: U.S. Nuclear Physical Security Collaboration, dated December 15, 2011

Office of Security formal policy clarification: https://powerpedia.energy.gov/wiki/Office_of_Security

Personnel Security

Atomic Energy Act of 1954 (as amended)

Executive Order 12968, Access to Classified Information, August 1995

Executive Order 13587, Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information, October 2011

Presidential Memorandum, National Insider Threat Policy and Minimum Standards for Executive Branch Insider Threat Programs, November 2012

5 CFR 736, Personnel Investigations

10 CFR 707, Workplace Substance Abuse Programs at DOE Sites

10 CFR 710, Procedures for Determining Eligibility for Access to Classified Matter and Special Nuclear Material

10 CFR 712, Human Reliability Program

48 CFR 970.2201-1-2(a)(1)(ii), Labor Relations

49 CFR 40, Subparts J – N, *Procedures for Transportation Workplace Drug and Alcohol Testing Programs*

Secretary of Energy Memorandum, *Decisions Regarding Drug Testing for Department of Energy Positions That Require Access Authorizations (Security Clearances)*, September 14, 2007

Chief Health, Safety and Security Officer Memorandum, Drug Testing, December 3, 2007

DOE Order 142.3A, Unclassified Foreign Visits and Assignments Program

DOE Order 343.1, Federal Substance Abuse Testing Program

DOE Order 470.3C, Design Basis Threat

DOE Order 470.4B, Admin Chg 2, Safeguards and Security Program

DOE Order 470.5, Insider Threat Program

DOE Order 472.2, Change 1, Personnel Security

Protective Force

10 Code of Federal Regulations (CFR) 1046, Physical Protection of Security Interests

10 CFR 1047, Limited Arrest Authority and Use of Force by Protective Force Officers

DOE Order 473.3A, Protection Program Operations

NNSA Supplemental Directive 473.3, Enterprise Mission Essential Task List-Based Protective Force Training Program

DOE-Standard (STD) 1212-2012, Explosive Safety

Physical Protection Systems

Executive Order 12829, National Industrial Security Program

10 Code of Federal Regulations (CFR) Part 860, Trespassing on Department of Energy Property

10 CFR Part 1046, Physical Protection of Security Interests

32 CFR 2004, National Industrial Security Program Directive No.1

National Security Decision Directive 298, National Operations Security Program

DOE Order 226.1B, Implementation of Department of Energy Oversight Policy

DOE Policy 226.2B, DOE Oversight Policy O226.1B, Implementation of DOE Oversight Policy

DOE Order 227.1A, Independent Oversight Program

DOE Guide 414.1-1B, Management and Independent Assessments Guide for Use with DOE 0226.1A

DOE Policy 470.1A, Safeguards and Security Program

DOE Order 470.4B, Protection Program Management

DOE Manual 470.4-1 Chg 1, Safeguards and Security Program Planning and Management

DOE Manual 470.4-2 Chg 1, Physical Protection

DOE Order 470.6, Technical Security Program, Official Use Only Attachments 3-5

DOE Manual 471.1-1 Chg 1, Identification and Protection of Unclassified Controlled Nuclear Information Manual

DOE Order 471.6, Chg 2, Information Security

DOE Order 472.2, Personnel Security (Human Reliability Program sections)

DOE Order 473.3A (areas of focus: Attachment 3, Sections A, B, and C)

DOE Order 470.3C, Design Basis Threat

DOE Standard (STD) 1036-93, Guide to Good Practices for Independent Verification

DOE-STD-1171-2009, *Safeguards and Security Functional Area Qualification Standard* (Areas of focus include: Section B, Physical Security)

Department of Defense 5220.22-M, National Industrial Security Program Operating Manual

Areas of focus include:

- Chapter 1, General Provisions and Requirements
- Chapter 2, Security Clearances
- Chapter 3, Security Training and Briefings
- Chapter 4, Classification and Marking
- Chapter 5, Safeguarding Classified Information
- Chapter 9, Special Requirements

• Chapter 11, Miscellaneous Information

Office of Enterprise Assessments Independent Oversight Program Appraisal Process Protocols

Office of Security Assessments Appraisal Process Protocols

Office of Security Assessments Limited-Notice Performance Test Appraisal Guide, December 2016

Material Control and Accountability

Program Management

DOE Order 151.1C, Comprehensive Emergency Management System

DOE Order 227.1, Independent Oversight Program

DOE Order 232.2, Administrative Change 1, Occurrence Reporting and Processing of Operations Information

DOE Order 251.1C, Departmental Directives Program

DOE Order 470.3B, Graded Security Protection (GSP) Policy

DOE Order 470.4B, Change 1, Safeguards and Security Program

DOE Order 472.2, Change 1, Personnel Security

DOE Order 473.3A, Protection Program Operations

DOE Order 474.2, Change 4, Nuclear Material Control and Accountability

DOE Order 151.1D, Comprehensive Emergency Management System

DOE Order 226.1B, Implementation of DOE Oversight

DOE Order 231.1 B, Admin Chg 1, Environment, Safety, and Health Reporting

DOE Order 251.1D, Departmental Directives Program

DOE Order 470.3B, Graded Security Protection Policy (archived but still applicable)

DOE Order 470.3C, Design Basis Threat (DBT) Order

DOE Policy 226.2, Policy for Federal Oversight and Contractor Assurance Systems

DOE-STD-1194-2011, Nuclear Materials Control and Accountability

Office of Security Assessments Appraisal Process Protocols, January 2017

Material Control

10 CFR 710 "Criteria And Procedures For Determining Eligibility For Access To Classified Matter Or Special Nuclear Material"

ASTM Standard C993-97, 2003, "Standard Guide for In-Plant Performance Evaluation of Automatic Pedestrian SNM Monitors," ASTM International, West Conshohocken, PA, <u>www.astm.org</u>

ASTM C1112-99, 2005, "Standard Guide for Application of Radiation Monitors to the Control and Physical Security of Special Nuclear Material," ASTM International, West Conshohocken, PA, <u>www.astm.org</u>

ASTM C1169-97, 2003, "Standard Guide for Laboratory Evaluation of Automatic Pedestrian SNM Monitor Performance," ASTM International, West Conshohocken, PA, <u>www.astm.org</u>

ASTM C1189-02, "Standard Guide to Procedures for Calibrating Automatic Pedestrian SNM Monitors," ASTM International, West Conshohocken, PA, <u>www.astm.org</u>

ASTM C1236-99, 2005, "Standard Guide for In-Plant Performance Evaluation of Automatic Vehicle SNM Monitors," ASTM International, West Conshohocken, PA, <u>www.astm.org</u>

ASTM C1237-99, 2005, "Standard Guide to In-Plant Performance Evaluation of Hand-Held SNM Monitors," ASTM International, West Conshohocken, PA, <u>www.astm.org</u>

"Entry-Control Systems Technology Transfer Manual," Sandia National Laboratories Report SAND87-1927 (November 1988)

"Safeguards Seals Reference Guide," U.S. Department of Energy, Office of Safeguards and Security (September 1993)

Measurements

Active Nondestructive Assay of Nuclear Materials, prepared by Tsahi Gozani for the U.S. NRC, NUREG/CR-0602, 1981

ANSI N15.36, Nuclear Materials – Nondestructive Assay Measurement Control and Assurance

ASTM C 1030 Standard Test Method for Determination of Plutonium Isotopic Composition by Gamma-Ray Spectrometry

ASTM C 1068-03, Standard Guide for Qualification of Measurement Methods by a Laboratory Within the Nuclear Industry

ASTM C 1108 Standard Test Method for Plutonium by Controlled-Potential Coulometry

ASTM C 1133 Test Method for Nondestructive Assay of Special Nuclear Material in Low-Density Scrap and Waste by Segmented Passive Gamma-Ray Scanning

ASTM C 1207 Test Method for Nondestructive Assay of Plutonium in Scrap and Waste by Passive Neutron Coincidence Counting

ASTM C 1221 Test Method for Nondestructive Analysis of Special Nuclear Materials in Homogeneous Solutions by Gamma-Ray Spectrometry

ASTM C 1316 Standard Test Method for Nondestructive Assay of Nuclear Material in Scrap and Waste by Passive-Active Neutron Counting Using 252Cf Shuffler

ASTM C 1380 Standard Test Method for Determination of Uranium Content and Isotopic Composition by Isotope Dilution Mass Spectrometry

ASTM C 1455 Standard Test Method for Nondestructive Assay of Special Nuclear Material Holdup Using Gamma-Ray Spectroscopic Methods

ASTM C 1458 Standard Test Method for Nondestructive Assay of Plutonium, Tritium and 241Am by Calorimetric Assay

ASTM C 1490 Standard Guide for the Selection, Training and Qualification of Nondestructive Assay (NDA) Personnel

ASTM C 1500 Standard Test Method for Nondestructive Assay of Plutonium by Passive Neutron Multiplicity Counting

ASTM C 1514 Standard Test Method for Measurement of 235U Fraction Using Enrichment Meter Principle

ASTM C 1625 Standard Test Method for Uranium and Plutonium Concentrations and Isotopic Abundances by Thermal Ionization Mass Spectrometry

ASTM C 1592/C 1592M-09, Standard Guide for Making Quality Nondestructive Assay Measurements

ASTM C 1718 Standard Test Method for Nondestructive Assay of Radioactive Material by Tomographic Gamma Scanning

Guide to the Expression of Uncertainty in Measurement, International Standards Organization, 1993, ISBN-92-67-10188-9, <u>http://www.bipm.org/en/publications/guides/gum.html</u>

Handbook of Nuclear Safeguards Measurement Methods, edited by D. R. Rogers, NUREG/CR-2078, September 1983

Quantifying Uncertainty in Analytical Measurement 2nd edition (2000) [available at http://www.measurementuncertainty.org.]

Passive Nondestructive Assay of Nuclear Materials, edited by Doug Reilly, Norbert Ensslin, and Hastings Smith, Jr., NUREG/CR-5550, March 1991

Statistical Methods for Nuclear Material Management, edited by Michael Bowen and Carl A. Bennett, NUREG/CR-4604, December 1988

Statistical Methods in Nuclear Material Control, edited by John L. Jaech, USAEC TID-26298, (1973)

Material Accounting

36 CFR 1220, Federal Records

DOE Order 142.2A, Administrative Change 1, Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency

DOE Order 200.1A, Information Technology Management

DOE Order 243.1B, Administrative Change 1, Records Management Program

Nuclear Materials Management and Safeguards System (NMMSS) Users Guide, DOE/NNSA Office of Nuclear Materials Integration, NA-73

GAAP Guide (2013), Jan R. Williams, Joseph V Carcello, Terry L Neal, and Judith Weiss

Physical Inventory

ANSI Standard 15.3, Physical Inventories of Nuclear Material

Murdock, C., C. E. Crawford, D. L. Jewell, and A. R. Kubasek. 1999, Physical Inventory Sampling, Journal of Institute of Nuclear Materials Management, Annual Proceedings

Appraisal Process Protocols, Office of Enforcement and Oversight, Independent Oversight Program, November 2012

Information Security

DOE Order 470.4B, Admin Chg 2, Safeguards and Security Program

DOE Order 470.6, Technical Security Program

DOE Order 471.1B, Identification and Protection of Unclassified Controlled Nuclear Information

DOE Order 471.6, Admin Chg 2, Information Security

DOE Order 472.2, Admin Chg 1, Personnel Security

DOE Order 473.3B, Chg 1, Protection Program Operations

DoD 5220.22-M, National Industrial Security Program Operating Manual

ICD 700, Protection of National Intelligence

ICD 702, Technical Surveillance Countermeasures

ICD 703, Protection of Classified National Intelligence

ICD 705, Sensitive Compartmented Information Facilities

ICS 705-1, Physical and Technical Standards for Sensitive Compartmented Information Facilities

ICS 705-2, Standards for Accreditation and Reciprocal Use of Sensitive Compartmented Information Facilities

IC Tech Spec for – ICD/ICS 705, *Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities*

ICD 710, Classification Management and Control Markings System

DCID 6/9, Physical Security Standard for Sensitive Compartmented Information Facilities

CNSSAM TEMPEST 1/13, Red/Black Installation Guidance

CNSSD 510, Directive on the use of Mobile Devices in Secure Spaces

CNSSI 7003, Protected Distribution Systems

CNSSP 17, Policy on Wireless Systems

CNSSP 300, National Policy on Control of Compromising Emanations

(ICDs replaced the DCIDs; however, the DCIDs still apply at some sites.)

(Committee on National Security Systems [CNSS] regulations apply to the TSP subtopics on TEMPEST, PDS, and WISEC.)